

**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: \_\_\_\_\_ Examiner #: \_\_\_\_\_ Date: \_\_\_\_\_  
 Art Unit: \_\_\_\_\_ Phone Number 30 \_\_\_\_\_ Serial Number: \_\_\_\_\_  
 Mail Box and Bldg/Room Location: \_\_\_\_\_ Results Format Preferred (circle): PAPER DISK E-MAIL

**If more than one search is submitted, please prioritize searches in order of need.**

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

**\*For Sequence Searches Only\*** Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

\*\*\*\*\*  
**STAFF USE ONLY**

	Type of Search	Vendors and cost where applicable
Searcher <u>D. Schreiber</u>	NA Sequence (#) <u>4</u>	STN _____
Searcher Phone # <u>272-2526</u>	AA Sequence (#) _____	Dialog _____
Searcher Location <u>Rensselaer E01A61</u>	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>4/2</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>14</u>	Fulltext _____	Sequence Systems <u>CompuGen</u>
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>8</u>	Other _____	Other (specify) _____

118552

Schreiber, David

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**From:** Ramirez, Delia  
**Sent:** Monday, March 29, 2004 5:54 PM  
**To:** Schreiber, David  
**Subject:** case 09/624670

Hi,

I would like to request the following interference search:

1. seq id 5 and 6 in the nucleic acid databases
2. seq id 63 and 64 in the nucleic acid databases

Thank you,

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Delia M. Ramirez, Ph.D.  
Patent Examiner  
Recombinant Enzymes-Art Unit 1652  
USPTO  
400 Dulany Street, Remsen Bldg., 3A74, Mail room 3C70  
Alexandria, VA 22314  
(571) 272-0938  
delia.ramirez@uspto.gov

04

55 09

GenCore version 5.1.6  
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OM protein - nucleic search, using frame\_plus\_p2n model

Run on: April 1, 2004, 08:28:07 ; Search time 78.9239 Seconds  
(without alignments)  
2102.410 Million cell updates/sec

Title: US-09-624-670-64

Perfect score: 1651  
Sequence: 1 MEHFDASLSYFKAFILGPRD.....HNSPFSLSNVKPKRKQKD 299

Scoring table:

BLOSUM62  
Xgapop 10.0, Xgapext 0.5  
Ygapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Delop 6.0, Delext 7.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Command line parameters:

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-Q=/cgn2\_1/USPFO.epool/US09624670/runat\_30032004\_071120\_14114/app\_query.fasta\_1.910  
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-LIST=45 -DOCALLIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTPMT=pco -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000  
-USER=US09624670 @CGN 1 1 76 @runat\_30032004\_071120\_14114 -NCPU=6 -ICPU=3  
-NO MMAP -LARGESUBSTR\_NEG\_SCORES=0 -WAIT -DSBLOCK=100 -LONGLOG  
-DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6  
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

Issued Patents NA:\*  
1: /cgn2\_6/ptodata/2/ina/5A.COMB.seg:\*  
2: /cgn2\_6/ptodata/2/ina/5B.COMB.seg:\*  
3: /cgn2\_6/ptodata/2/ina/6A.COMB.seg:\*  
4: /cgn2\_6/ptodata/2/ina/6B.COMB.seg:\*  
5: /cgn2\_6/ptodata/2/ina/PCTUS.COMB.seg:\*  
6: /cgn2\_6/ptodata/2/ina/backfile1.seg:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1651	100.0	900	4	US-09-903-456-6
2	1558	94.4	914	4	US-09-769-883-21
3	1558	94.4	914	4	US-09-903-456-3
4	956.5	57.9	879	4	US-09-903-456-5
5	476.5	28.9	1482	4	US-09-149-476-258
6	476.5	28.9	1542	4	US-09-149-476-106
7	466.5	28.3	1812	4	US-09-023-655-330
8	395.5	24.0	819	4	US-09-903-456-7
9	395.5	24.0	819	4	US-09-903-456-72
10	391.5	23.7	819	4	US-09-903-456-73
11	391	23.7	377	4	US-09-621-976-12605
12	390.5	23.7	819	4	US-09-903-456-70

13	388.5	23.5	818	4	US-09-903-456-71
14	386.5	23.4	819	4	US-09-903-456-69
15	385.5	23.3	819	4	US-09-903-456-74
16	381.5	23.1	957	4	US-09-769-883-22
17	381.5	23.1	957	4	US-09-903-456-2
18	326.5	19.8	1854	4	US-08-249-420-1
19	326.5	19.8	1854	4	US-08-737-663-1
20	294	17.8	630	4	US-09-903-456-67
21	255	15.4	580	4	US-09-145-828A-10
22	255	15.4	590	4	US-09-903-456-17
23	249	15.1	954	4	US-09-145-828A-1
24	249	15.1	954	4	US-09-903-456-1
25	246.5	14.9	867	4	US-09-903-456-4
26	219	13.3	989	1	US-07-885-970A-7
27	219	13.3	989	1	US-08-298-687A-7
28	219	13.3	989	1	US-08-530-797-6
29	219	13.3	989	1	US-08-298-828-7
30	219	13.3	989	1	US-08-787-335-6
31	217	13.1	798	4	US-09-903-456-63
32	209	12.7	587	4	US-09-145-828A-9
33	209	12.7	587	4	US-09-903-456-16
34	189	11.4	124	3	US-09-172-108-45
35	146	8.8	546	4	US-09-669-751-246
36	138.5	8.4	834	4	US-09-149-476-259
37	122	7.4	67	4	US-09-621-976-17477
38	110	6.7	3227	4	US-09-976-594-775
39	100.5	6.1	22846	2	US-08-469-461-3
40	100.5	6.1	22846	3	US-07-890-609-3
41	99.5	6.0	918	4	US-09-134-000C-751
42	99	6.0	4079	1	US-08-121-057-2
43	99	6.0	4079	2	US-08-509-187D-2
44	99	6.0	4079	2	US-09-121-396-2
45	99	6.0	4079	5	PCT-US93-09704A-2

#### ALIGNMENTS

RESULT 1  
US-09-903-456-6  
Sequence 6, Application US/09903456  
Patent No. 6677145  
GENERAL INFORMATION:  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradip  
APPLICANT: Leonard, Amanda Eun-Young  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Pereira, Suzette L.  
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
FILE REFERENCE: 6407 US P3  
CURRENT APPLICATION NUMBER: US/09/903,456  
PRIOR FILING DATE: 2001-07-11  
PRIOR APPLICATION NUMBER: US 09/624,670  
PRIOR FILING DATE: 2000-07-24  
PRIOR APPLICATION NUMBER: US 09/379,095  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: US 09/145,828  
PRIOR FILING DATE: 1998-09-02  
NUMBER OF SEQ ID NOS: 116  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 6  
LENGTH: 900  
TYPR: DNA  
ORGANISM: Mus musculus  
US-09-903-456-6  
Alignment Scores:  
Pred. No.: 6.8e-193  
Score: 1651.00  
Best Local Similarity: 100.00%  
Query Match: 100.00%  
Length: 900  
Matches: 299  
Conservative: 0  
Mismatches: 0  
Indels: 0  
Gaps: 0

US-09-624-670-64 (1-299) x US-09-903-456-6 (1-900)

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QY      1 MetGluH:SPheAspAlaSerLeuSerThrTyPheUyAlaPheLeuGlyProArgAsp 20
Db      1 ATGGAACTTTTGGATGCGTCACTGACGTAACCTATTTCAGAGGCTTCGGGGCCCGAGAT 60
QY      21 ThrArgValIysGlyTTPheLeuLeuAspAsnTyrlleProthrpheValCysSerVal 40
Db      61 ACAGAGTCAGAGATGAGTTCCTCTGACCAATTACATCCCTACGTTGCTGTTCTGTT 120
QY      41 lletyLeuLeuilealTPleuGlyProlyTyMetIysAsnAArgInProPheSer 60
Db      121 ATTACTTACTGATGATGATGCTGGACCAAAATACAGAAACCGGACGCGTCTCT 180
QY      61 CysArgGlyIleLeuGlnLeuTyAsnLeuGlyLeuThrLeuLeuSerLeuTyMetPhe 80
Db      181 TGCCGAGGATCCTGGAGTTGATATACCTTGGACACCCGCTGCTCTCTACATGTTTC 240
QY      81 TyrgluLeuValThrGlyValTPgluGlyIysTyAsnPhePheCysGlnGlyThrArg 100
Db      241 TAGAGTTGTTGACAGGTGTGTGGAGGAGCAAAATACAACTTTTCTGCCAGGGAACAGC 300
QY      101 SerAlaGlyGlySerAspMetLysIlelleArgValLeuTPTPtyTyTPheSerLys 120
Db      301 AGCGCGAGAAATCCGATATGAGATCATCCGCGTCTCTGGTACTGCTCTCTCAAA 360
QY      121 LeuileGluPheMetAspThrPhePhePheIleLeuArgIysAsnAsnIsgInIleThr 140
Db      361 CTGATCGAATTCATGAGACACCTTTTCTTCACTCTGCAAGAACCAACAGATCACC 420
QY      141 ValLeuH:leValTyRH:SH:SAIaThrMetLeuAnIleTPTPPheValMetAsnTP 160
Db      421 GTGCTCCAGTGTACACACGACACGTCACATGCTCAACATCGTGTGTGATGAATGG 480
QY      161 ValProCysGlyH:leSerTyPheGlyValaThrLeuAsnSerPheIleH:leValLeuMet 180
Db      481 GTTCCTCGGCGCATTCATATTGTTGTCGACACCTCAACAGCTTCATGCTCATG 540
QY      181 TyrSerTyTyrglyLeuSerSerIleProSerMetArgProTyLeuTPTPtyLys 200
Db      541 TACTCGTACTATGCTGTGCTGCCATCCGTCATGCTGCTCTCTCTGATGAGAAAG 600
QY      201 TyrlleThrglnGlyGlnLeuValGlnPheValLeuThrIleleGlnInThrTyCysGly 220
Db      601 TACATCATCTCAAGGGGAGCTGTGTCAGTTTGTCTGACATCATCCAGACGACTGGGG 660
QY      221 ValPheTyPProCysSerPheProLeuGlyTyTPhePheGlnIleGlyTyMetIle 240
Db      661 GTCTTCTGGCCATGCTCCTTCCCTCTCGGGTGGCTGTTCTTCCAGATTGATACATGAT 720
QY      241 SerleuilealLeuPheThrAsnPheTyrlleGlnInThrTyAsnIysGlyAlaSer 260
Db      721 TCCCTGATGCTCTCTTCAAACTTCACTTCACTTCACTTCACTTCACTTCACTTCACT 780
QY      261 ArgArgIysAspH:leuIysGlyH:leGlnAsnGlySerValAlaIalaIasngIyH:le 280
Db      781 CGAGAGAAAGACCACTGTAAGGGGACACAGACGGGCTGTGGCGCGCTCAAGGAC 840
QY      281 ThrAsnSerPheProSerLeuGlnAsnSerValIysProArgIysGlnIysAsp 299
Db      841 ACCAACAAGCTTCCCTCTGAGAAACAGCGTGAAGCCAGAGACGACGAGAAAGAT 897

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RESULT 2  
US-09-769-863-21  
Sequence 21, Application US/09769863

GENERAL INFORMATION:  
PATENT NO. 6635451  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradipt  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Das, Tapas  
APPLICANT: Thurmond, Jennifer  
APPLICANT: Pereira, Suzette D.

```

/ TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
/ FILE REFERENCE: 6763 US 01
/ CURRENT APPLICATION NUMBER: US/09/769,863
/ CURRENT FILING DATE: 2001-01-25
/ NUMBER OF SEQ ID NOS: 32
/ SOFTWARE: FASTSEQ for Windows Version 4.0
/ SEQ ID NO 21
/ LENGTH: 914
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-09-769-863-21

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Alignment Scores:
Pred. No.: 1,88-181 Length: 914
Score: 1558.00 Matches: 278
Percent Similarity: 97.32% Conservative: 13
Best Local Similarity: 92.98% Mismatches: 8
Query Match: 94.37% Indels: 0
DB: 4 Gaps: 0

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US-09-624-670-64 (1-299) x US-09-769-863-21 (1-914)

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QY      1 MetGluH:SPheAspAlaSerLeuSerThrTyPheUyAlaPheLeuGlyProArgAsp 20
Db      1 ATGGAACTTTTGGATGCGTCACTGACGTAACCTATTTCAGAGGCTTCGGGGCCCGAGAT 60
QY      21 ThrArgValIysGlyTTPheLeuLeuAspAsnTyrlleProthrpheValCysSerVal 40
Db      61 ACAGAGTCAGAGATGAGTTCCTCTGACCAATTACATCCCTACGTTGCTGTTCTGTT 120
QY      41 lletyLeuLeuilealTPleuGlyProlyTyMetIysAsnAArgInProPheSer 60
Db      121 ATTACTTACTGATGATGATGCTGGACCAAAATACAGAAACCGGACGCGTCTCT 180
QY      61 CysArgGlyIleLeuGlnLeuTyAsnLeuGlyLeuThrLeuLeuSerLeuTyMetPhe 80
Db      181 TGCCGAGGATCCTGGAGTTGATATACCTTGGACACCCGCTGCTCTCTACATGTTTC 240
QY      81 TyrgluLeuValThrGlyValTPgluGlyIysTyAsnPhePheCysGlnGlyThrArg 100
Db      241 TAGAGTTGTTGACAGGTGTGTGGAGGAGCAAAATACAGAAACCGGACGCGTCTCT 300
QY      101 SerAlaGlyGlySerAspMetLysIlelleArgValLeuTPTPtyTyTPheSerLys 120
Db      301 AGCGCGAGAAATCCGATATGAGATCATCCGCGTCTCTGGTACTGCTCTCTCAAA 360
QY      121 LeuileGluPheMetAspThrPhePhePheIleLeuArgIysAsnAsnIsgInIleThr 140
Db      361 CTGATCGAATTCATGAGACACCTTTTCTTCACTCTGCAAGAACCAACAGATCACC 420
QY      141 ValLeuH:leValTyRH:SH:SAIaThrMetLeuAnIleTPTPPheValMetAsnTP 160
Db      421 GTGCTCCAGTGTACACACGACACGTCACATGCTCAACATCGTGTGTGATGAATGG 480
QY      161 ValProCysGlyH:leSerTyPheGlyValaThrLeuAsnSerPheIleH:leValLeuMet 180
Db      481 GTTCCTCGGCGCATTCATATTGTTGTCGACACCTTAAAGCTTCACTCAACGCTCATG 540
QY      181 TyrSerTyTyrglyLeuSerSerIleProSerMetArgProTyLeuTPTPtyLys 200
Db      541 TACTCGTACTATGCTGTGCTGCCATCCGTCATGCTGCTCTCTCTGATGAGAAAG 600
QY      201 TyrlleThrglnGlyGlnLeuValGlnPheValLeuThrIleleGlnInThrTyCysGly 220
Db      601 TACATCATCTCAAGGGGAGCTGTGTCAGTTTGTCTGACATCATCCAGACGACTGGGG 660
QY      221 ValPheTyPProCysSerPheProLeuGlyTyTPhePheGlnIleGlyTyMetIle 240
Db      661 GTCTTCTGGCCATGCTCCTTCCCTCTCGGGTGGCTGTTCTTCCAGATTGATACATGAT 720
QY      241 SerleuilealLeuPheThrAsnPheTyrlleGlnInThrTyAsnIysGlyAlaSer 260
Db      721 TCCCTGATGCTCTCTTCAAACTTCACTTCACTTCACTTCACTTCACTTCACTTCACT 780

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QY 261 ArgatgysasphileuysgylhysglnasnglyserValAlaAlaValaenglyhis 260  
DB 761 CGAGGAAAGACCACTTGAAGACCAACCAATGAGCTGCTGCTGCTGATGAGAC 840  
QY 281 ThraanserPheProSerLeuGluAanserValiysProArglysglnArglysaap 299  
DB 841 ACCAAGAGCTTTTCAACCCCTGGAACAAATGTGAAGCCAAGAAAGCTGCGAAGAT 897

## RESULT 3

US-09-903-456-3  
Sequence 3, Application US/09903456  
Patent No. 6677145  
GENERAL INFORMATION:  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradip  
APPLICANT: Leonard, Amanda Eun-Yeong  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Pereira, Suzette L.  
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
FILE REFERENCE: 6407.US.P3  
CURRENT APPLICATION NUMBER: US/09/903.456  
CURRENT FILING DATE: 2001-07-11  
PRIOR APPLICATION NUMBER: US 09/624,670  
PRIOR FILING DATE: 2000-07-24  
PRIOR APPLICATION NUMBER: US 09/379,095  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: US 09/145,828  
PRIOR FILING DATE: 1998-09-02  
NUMBER OF SEQ ID NOS: 116  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 3  
LENGTH: 914  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-903-456-3

## Alignment Scores:

Pred. No.: 1.8e-181 Length: 914  
Score: 1558.00 Matches: 278  
Percent Similarity: 97.32% Conservative: 13  
Best Local Similarity: 92.98% Mismatches: 8  
Query Match: 94.37% Indels: 0  
DB: 4 Gaps: 0

US-09-624-670-64 (1-299) x US-09-903-456-3 (1-914)

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyRphelyAlaPheLeuGlyProArgasp 20  
DB 1 ATGGAACATTTGATGATCACTAGTACCTATTCAAGGCATTGCTAGGCCCTCGAGAT 60  
QY 21 ThraGVallysglyTTPheLeuLeuAspAntyRleProThrPheValCysSerVal 40  
DB 61 ACTGAGCTAAAGAGATGCTTCTCTGACACATTAATACCCCATTTATCTGCTGTGC 120  
QY 41 TleTyLeuLeuLleValITripLeuGlyProLysTyRphelyAsnArginProPheSer 60  
DB 121 ATATATTACTAATATTGATGCTGAGACCAATATACCTGAGATTAACGCCATTCTCT 180  
QY 61 CysArgGlyLeuLeuGlnLeuTyRAsnLeuGlyLeuThrLeuLeuSerLeuTyRMetPhe 80  
DB 181 TGCCGGGGGATTTAGTGTATATACCTTGACATCACTGCTGCTGTATATGTTTC 240  
QY 81 TyRGluleuValIThrGlyValITripGluGlyLysTyRAsnPhePheCysGlnGlyThrArg 100  
DB 241 TGTGAGTAGTAAGAGAGATGGAGGAAATACAACTTCTCTGTCAAGGACACAGC 300  
QY 101 SerAlaGlyGlnSerAspMetLysIleIleArgValLeuTrpTyRtyRpheserLys 120  
DB 301 ACCGAGAGAGATCAATATGATATATCCGTCTCTCGTGTGACTACTTCTCCAAA 360  
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgLysAsnHisGlnIleThr 140

DB 361 CTCATAGATTATGACACTTCTTCTTCACTCTGCGAGAACACCAACCAAGATCAAC 420  
QY 141 ValLeuHisValTyRHisAlaThrMetLeuAsnIleTrpThrPheValMetAsnTrp 160  
DB 421 GTCTTGACAGCTTACACCACTGCTGAGCTGAGACATCTGATGTTGTGATGAAC 480  
QY 161 ValProCysGlyHisSerTyRphedGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180  
DB 481 GTCCCTGCGGCGCACTTATTTTGGTGCACACTTAATAGCTTATTCACAGTCTCAT 540  
QY 181 TyRserTyRtyRglLeuSerSerIleProSerMetArgProTyRleuTrpTyRlysa 200  
DB 541 TACCTTACATAGTGTGTTGTGTCAGTCCCTTCATCGTCACTACCTCTGGTGAAGAG 600  
QY 201 TyRleThrglnGlyLeuValGlnPheValLeuThrIleIleGlnThrThrcysGly 220  
DB 601 TACATCACTAGGGGACAGCTGCTTCACTTGTCTGACATATCAACAGACAGCTCGGG 660  
QY 221 ValPheTrpProCysSerPheProLeuGlyTTPhePhePheGlnIleGlyTyRMetLle 240  
DB 661 GTCACTGCGCGGACATATCCCTTGGTGTGTATTTCCAGATTGATACATTAT 720  
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyRleGlnThrTyRAsnLysGlyAlaSer 260  
DB 721 TCCTGATGCTCTCTTCAAACTTCTACATTCACCTTCAACAAGAGAGGCTCTC 780  
QY 261 ArgatgysasphileuysgylhysglnasnglyserValAlaAlaValaenglyhis 280  
DB 781 CGAGGAAAGACCACTTGAAGACCAACCAATGAGCTGCTGCTGATGAGAC 840  
QY 281 ThraanserPheProSerLeuGluAanserValiysProArglysglnArglysaap 299  
DB 841 ACCAAGAGCTTTTCAACCCCTGGAACAAATGTGAAGCCAAGAAAGCTGCGAAGAT 897

## RESULT 4

US-09-903-456-5  
Sequence 5, Application US/09903456  
Patent No. 6677145

GENERAL INFORMATION:  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradip  
APPLICANT: Leonard, Amanda Eun-Yeong  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Pereira, Suzette L.  
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
FILE REFERENCE: 6407.US.P3  
CURRENT APPLICATION NUMBER: US/09/903.456  
CURRENT FILING DATE: 2001-07-11  
PRIOR APPLICATION NUMBER: US 09/624,670  
PRIOR FILING DATE: 2000-07-24  
PRIOR APPLICATION NUMBER: US 09/379,095  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: US 09/145,828  
PRIOR FILING DATE: 1998-09-02  
NUMBER OF SEQ ID NOS: 116  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 5  
LENGTH: 879  
TYPE: DNA  
ORGANISM: Mus musculus  
US-09-903-456-5

## Alignment Scores:

Pred. No.: 1.09e-107 Length: 879  
Score: 956.50 Matches: 168  
Percent Similarity: 71.58% Conservative: 36  
Best Local Similarity: 58.95% Mismatches: 78  
Query Match: 57.93% Indels: 3  
DB: 4 Gaps: 1

US-09-624-670-64 (1-299) x US-09-903-456-5 (1-879)

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyRphelyAlaPheLeuGlyProArgasp 20

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Db 10 :CTAAGGCGCTTTGATATGAGTCAATGCTTCTTGAGCAACATGTTGGACCGAGAT 69
Qy 21 ThAArgVallysglyTrpPheLeuLeuAspAsnYrIleProThrPheValCysSerVal 40
Db 70 TCTCGAGTTCGCGGGGGTTCCTGCTGAGCTCTTACCTTCCACCTTACTCTCCATC 129
Qy 41 IleTyrLeuLeuIleValTrpLeuGlyProIleTyrMetIleAsnArgGlnProPheSer 60
Db 130 ACGTACCTGCTCTCCGATATGCTGCTGGGTACCAATGATCAAGAAAGAGCCGCTGCT 189
Qy 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe 80
Db 190 CTCAGGCGCATCTCTCACTGATATACCTCGCAATCACACTCTTCTCGCTATATGCTG 249
Qy 81 TyrGluLeuValThrGlyValTrpGluGlyIleTyrAsnPhePheCysGlnGlyThrArg 100
Db 250 GTGGAGCTCATCTCTCCAGCTGGAGAGAGGTTCACACTTGCATGTCAGAACTCGAC 309
Qy 101 SerAlaGlyIleSerAspMetIleIleArgValLeuTrpTrpTyrTyrPheSerIys 120
Db 310 AGTCAGAGAGAGAGATGATGTCGAGTACAGCAAGCTTGTGTGTACTACTCTCCAA 369
Qy 121 LeuIleGluPheMetSerThrPhePheIleLeuArgIleAsnAsnIleGlnIleThr 140
Db 370 CTGAGGAGTTCCTGAGACAGATTTCTTGTTCACGAAAGAACCAATCAATCAC 429
Qy 141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTrpTrpPheValMetAsnTrp 160
Db 430 TTCTTCATATGTCATACACACGCGTCACTGTTCAACATCTGCTGTGTTTGAACGG 489
Qy 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
Db 490 ATACCTTGTGCTAAAGCTCTTGTGACCCACCCGAAACAGTTTATCACTCTCATG 549
Qy 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTrpTyrIleIys 200
Db 550 TACTCTACTACGCGCTGTCTGTCTGCTCCCTCCATGACACAGTACCTTGTGAGAGAG 609
Qy 201 TyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrThrCysGly 220
Db 610 TACCTCACACAGGCTCAGCTGAGTGCATGTCATACACCATCACACACACCTGAGTCC 669
Qy 221 ValPheTrpProCysSerPheProLeuGlyTrpLeuPhePheGlnIleGlyTyrMetIle 240
Db 670 GTGGTGAAGCCCTGTGAGCTTCCCTTGTGCTGCTTCATCTTCCATATGATG 729
Qy 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleGlyAlaSer 260
Db 730 ACGTGGTCATCTGTTCTTAACTTATTTACAGACTACCGAAAGAGCGAGTGAAG 789
Qy 261 Arg-----ArgIleAspHisLeuIleGlyHisGlnAsnGlySerValAlaIleVal 277
Db 790 AAGAGCTGCAGAGAAAGAAAGTGAATGTTTCCCAAGCCCACTTAATTGTGCT 849
Qy 278 AsnGlyHisThrAsn 282
Db 850 AATGGCATGACGAC 864

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US-09-149-476-258
/ Sequence 258, Application US/09149476
/ Patent No. 6420526
/ GENERAL INFORMATION:
/ APPLICANT: Rosen et al.
/ TITLE OF INVENTION: 186 Human Secreted proteins
/ FILE REFERENCE: P2002P1
/ CURRENT APPLICATION NUMBER: US/09/149,476
/ CURRENT FILING DATE: 1998-09-08
/ EARLIER APPLICATION NUMBER: PCT/US98/04493
/ EARLIER FILING DATE: 1998-03-06
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/ EARLIER FILING DATE: 1997-03-07

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EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/049,610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061,060
EARLIER FILING DATE: 1997-10-02

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Alignment Scores:
Pred. No.: 1,95e-48 Length: 1482
Score: 476.50 Matches: 103
Percent Similarity: 56.43% Conservative: 55
Best Local Similarity: 36.79% Mismatches: 97
Query Match: 28.86% Indels: 25
DB: 4 Gaps: 9

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US-09-624-670-64 (1-299) X US-09-149-476-258 (1-1482)

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DB 139 GATCCCGGATCCAGGAGCTTACCTCTGATGGGGTCC-----CCCTGTATATGACCTCC 192
QY 40 ValIleTrpLeuLeuIleValTrp-----LeuGlyProIleTrpMetIleAsnArg 56
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DB 193 ATTCTCTGACCTACGAGTGTACTCTCTCTGACCTGGGCTTCGACTATGCTATATCGG 252
QY 57 GluProPheSerCysArgGlyIleLeuGlnLeuTrpAsnLeuGlyLeuThrIleuLeuSer 76
    ::||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 253 AAGCCCTTCAGGCTCCGCTGCTTCAATGCTCTCACTGCTGCTGCTGCTGCTGCTGCTGCT 312
QY 77 LeuTrpMetPheTrpGlnLeuValThrGlyValTrpGlnGlyIleValTrpAsnDhePheCys 96
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 313 CTCACATGCTCTATATAGTTCCTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 372
QY 97 GluGlyThrArgSerIleGlyIleuSerAsp---MetIleIleIleTrpValLeuTrpTrp 115
    ::||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 373 GACCTGTGACATTTTCCAGACGACCTGAGGACCTTAGATGTTGGGATGGCTGGCTC 432

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QY 116 TyrTyrPheSerIysLeuIleIleGluPheMetAspThrPhePheIleLeuArgLysAsn 135  
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QY 176 IleHisValLeuMetTyrSerTyrTyrGlyLeuSerSerIle--ProSerMetArgPro 194  
Db 613 GTGATGTCTAATATGATGACCGTACTGAGATATATGCTTGGCCCTGTGGCAACACC 672  
QY 195 TyrLeuTyrTrpTyrValTyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIle 214  
Db 673 TACCTTGGTGGAAAAAGACATGACAGCCATTCAGCTGATGACATTTGTCTGGTCTCA 732  
QY 215 Ile-----GlnThrTrpCysGlyValPheTrpProCysSerPhe 227  
Db 733 CTGACATCTCCACAGTACTATTATGTCACGCTGTAACATACCACTACCACTATTATT 792  
QY 228 ProLeuGlyTrpLeuPhePheGlnIleGlyTyrMetIleSerLeuIleAlaLeuPheThr 247  
Db 793 CACCTCATCTGATGATGACACCACTCTTCTTCATG-----CTGTCTCC 837  
QY 248 AsnPheTyrIleGlnThrTyrAsnTyrSlyGlyAlaSerArgLysAspHisLeuLys 267  
Db 838 AACCTCTGATATACCTTATACCAAG-----GGCAGACGGCTCCCGGCACTTACG 891  
QY 268 GlyHisGlnAsnGlySer-----ValAlaIleValAsnGlyHisThrAsnSerPhePro 285  
Db 892 -----CAAATGAGATCCAGGTATTGCCAAGGTCAAGGCCCACTGAGAGCATGGCT 945

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US-09-149-476-106  
Sequence 106, Application US/09149476  
Patent No. 6420526  
GENERAL INFORMATION:  
APPLICANT: Rosen et al.  
TITLE OF INVENTION: 186 Human Secreted proteins  
FILE REFERENCE: P2002P1  
CURRENT APPLICATION NUMBER: US/09/149,476  
EARLIER FILING DATE: 1998-09-08  
EARLIER APPLICATION NUMBER: PCT/US98/044933  
EARLIER FILING DATE: 1998-03-06  
EARLIER APPLICATION NUMBER: 60/040,162  
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EARLIER APPLICATION NUMBER: 60/049,610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061,060
EARLIER FILING DATE: 1997-10-02

Alignment Scores:
Pred. No.: 2,07e-48 Length: 1542
Score: 476.50 Matches: 103
Percent Similarity: 56.43% Conservative: 55
Best Local Similarity: 36.79% Mismatches: 97
Query Match: 28,86% Indels: 25
DB: 4 Gaps: 9

US-09-624-670-64 (1-299) x US-09-149-476-106 (1-1542)
20 AspThrArgValIysGlyTrpPheLeuLeuAspAsnTrpIleProThrPheValCysSer 39
167 GATCCCCGAGATCCAGGCTACCTCTGATGGGCTCC-----CCCTTGCTAATGACCTCC 220
40 ValIleTyrlleuLeuValTrp-----LeuGlyProIysTyrlMetCysAsnArg 56
221 ATTCTCTGACCTACGATGATCTTCCTCTACCTTGCGCTCGATCATGCTAATGCG 280
57 GluProPheSerCysArgGlyIleLeuGlnLeuTyrlAsnLeuGlyLeuThrIleuLeuSer 76
281 AACCCCTTCAGCTCCGCTGCTTCAATGCTTCAACTTCTCACTGATGCACTCTCC 340
77 LeuTyrlMetCysTrpIleuValTrpGlyValTrpGluGlyIleTyrlAsnMetCys 96
341 CTCTACATGCTCATATAGTTCCTGATGCGGCTGCGAGCACTAACCCTGGCGCTGT 400
97 GluGlyThrArgSerIleGlyIleSerAsp--MetIleIleIleArgValLeuTrpTrp 115
401 GACCCGTGACATCTATCCAAAGCCCTGAGGACCTTAGATGTTGGGTGCGCTGCTC 460
116 TyrlTrpPheSerIleLeuIleGluPheMetAspTrpPhePheIleLeuArgIleAsn 135
461 TTCCTCTTCCCAAGTTCATGAGCTGAGCGAGGACAGATGATTTATCTCCGAAGAAA 520
136 AsnHisGlnIleThrValIleuHisValTyrlHisIleAsnIleMetLeuAsnIleTrpTrp 155
521 GACGGCGAGGTGACCTTCTTCAATGCTTCTTCACTGCTGCTCTCCCTCGAGCGGTGG 580
156 PheValMetAsnTrpValProCysGlyIleSerTyrlPheGlyIleValIleuAsnSerPhe 175
581 TGGGGGGTAAGATGCCCGGAGGAGATGGGCTTTTTCATGACATGATAAAGCTTCC 640
176 IleHisValLeuMetTyrlSerTyrlTyrlGlyIleuSerIle---ProSerMetArgPro 194
641 GTGATGTCATTAATGACCTGATCAAGGATTAATGACCTTGGCCCTGTGGCAACACC 700
195 TyrlLeuTrpTrpIleTyrlIleThrGlnGlnIleuValGlnPheValIleuThrIle 214
701 TACCTTGTGGAAAAAGACATGACGACCATTCAGCTATCCAGTTGTCTGCTCA 760
215 Ile-----GlnTrpTrpCysGlyValPheTrpProCysSerPhe 227
761 CTGACATCTCCAGTACTACTTATGATCCAGCTGTACTACAGTACCAAGTACATTTATT 820

```

QY 228 ProLeuGlyTyrPheLeuPheGlnIleGlyTyrMetIleSerLeuIleAlaLeuPheThr 247  
Db 821 CACCTCATCTGGATGATGACGACCATCTTCTTCATG-----CTGTCTCC 865  
QY 248 AsnPheTyrIleGlnThrTyrAsnIleGlyAlaSerArgArgIleAspPheLeuIle 267  
Db 866 AACCTCTGGATCCTTATACCAAG-----GGCAAGCGGCTGCCCGTGCATCTCAG 919  
QY 268 GlyHISGlnAsnGlySer-----ValAlaAlaValaIleGlnGlyHISThrAsnSerPhePro 285  
Db 920 -----CAAAATGAGCTCCAGGATGTCGCAAGGCAAGCCCACTGAGAGCATGGCT 973

RESULT 7  
US-09-023-655-430

/ Sequence 430, Application US/09023655  
/ Patent No. 6607872  
/ GENERAL INFORMATION:  
/ APPLICANT: Cocks, Benjamin G.  
/ APPLICANT: Susan G. Stuart  
/ APPLICANT: Jeffrey J. Seilhamer  
/ TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE  
/ NUMBER OF INVENTION: EXPRESSION  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: INCYTE PHARMACEUTICALS, INC.  
/ STREET: 3174 PORTER DRIVE  
/ CITY: PALO ALTO  
/ STATE: CALIFORNIA  
/ COUNTRY: USA  
/ ZIP: 94304

COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/09/023,655

/ FILING DATE: HEREWITH  
/ CLASSIFICATION:  
/ PRIORITY APPLICATION DATA:  
/ APPLICATION NUMBER:  
/ FILING DATE:  
/ CLASSIFICATION:  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Zeller, Karen J.  
/ REGISTRATION NUMBER: 37,071  
/ REFERENCE/DOCKET NUMBER: PA-0001 US  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (650) 955-0555  
/ TELEFAX: (650) 845-4166

/ INFORMATION FOR SEQ ID NO: 430:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 1812 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ IMMEDIATE SOURCE:  
/ CLONE: URETTU01  
/ LIBRARY: 1658706  
/ US-09-023-655-430

Alignment Scores:  
/ Pred. No.: 4.5e-47 Length: 1812  
/ Score: 466.50 Matches: 101  
/ Percent Similarity: 56.32% Conservative: 55  
/ Best Local Similarity: 36.46% Mismatches: 96  
/ Query Match: 28.26% Indels: 25  
/ DB: 4 Gaps: 9

US-09-624-670-64 (1-299) X US-09-023-655-430 (1-1812)

QY 23 ValIleGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerValIleTyr 42

Db 503 ATCCAGGGCTACCCCTCTATGAGGGTCC-----CCCTTGCTAATGACCTCATCTCTGCTG 556  
QY 43 LeuLeuIleValTyr-----LeuGlyProIleTyrMetIleAsnAlaGlnProPhe 59  
Db 557 ACCCTAGCTGATCTGTCTCTCTCTGCTGAGGCTGCAATGCGTATCGGAAGCCCTTC 616  
QY 60 SerCysArgGlyIleLeuGlnLeuTyrAsnLeuIleLeuThrLeuLeuSerLeuTyrMet 79  
Db 617 CAGCTCCGCTGCTCATATGTCTTCAACCTTCACATGGAGGACCTCCCTCTCATATT 676  
QY 80 PheTyrGlnLeuValThrGlyValTyrGlnIleTyrTyrAsnPhePheCysGlnGlyThr 99  
Db 677 GCTATGAGTCTCTGATGTCGGCTGCTGACACATACCTGACGCTGTCACCTGATG 736  
QY 100 ArgSerAlaGlyIleUserAsp---MetIleIleIleValLeuTyrPheTyrPhe 118  
Db 737 GACTATTCACAGCCCTGAGGACCTTGAAGATGGTGGGCTGCTCTCTCTCTCT 796  
QY 119 SerIleLeuIleGluPheMetAspThrPhePheIleLeuArgIleAsnAsnIleGln 138  
Db 797 TCCAGTTCATGAGCTGATGACACAGTATCTTATTCGCAAGAAAGACGGGACG 856  
QY 135 IletThrValLeuHisValTyrHisAlaThrMetLeuAsnIleTyrPheValMet 158  
Db 857 GTACCTCTCCACATGCTTCCATCAGCTGCTGCTCTGCTGAGCTGCTGCTGCTGCTG 916  
QY 159 AsnTyrValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisVal 178  
Db 917 AGATTCGCCCGGAGAGATGGCTCTTCCATGCTCATGATTAACCTTCGCGATGTC 976  
QY 179 LeuMetTyrSerTyrTyrGlyLeuSerSerIle---ProSerMetAlaProIleTyrLeuTyr 197  
Db 977 ATAAATGACCTGATACGATATCTGCTTGGCCCTGCGCTGCGCAACCTTACCTTGG 1036  
QY 198 TrpIleValTyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIle----- 215  
Db 1037 TGGAAAGACATACAGCCCATTCAGTGTATCCAGTTTGTCTGCTGCTGCTGCTGCTG 1096  
QY 216 -----GlnThrThrCysGlyValaIleTyrProCysSerPheProLeuGly 230  
Db 1097 TCCAGTACTACTTATGTCAGCTGATACCAACCAACCAACCAATATTCACCTCATC 1156  
QY 231 TrpLeuPhePheGlnIleGlyTyrMetIleSerLeuIleAlaLeuPheThrAsnPheTyr 250  
Db 1157 TGGATGATGCGACCATCTTCTCATG-----CTGTCTCCAACTTCTGG 1201  
QY 251 IleGlnThrTyrAsnIleGlyAlaSerArgArgIleAspPheIleLeuGlyIleGln 270  
Db 1202 TATCACTCTTATACCAAG-----GGCAAGGGCTGCCCGCTGCATTCAG-----CAA 1249  
QY 271 AsnGlySer-----ValAlaAlaValaIleGlnIleTyrAsnSerPhePro 285  
Db 1250 AATGAGCTCCAGTATGTCAGGCTCAAGGCAAGCCCACTGAGAGCATGGCT 1300

RESULT 8  
US-09-903-456-7  
/ Sequence 7, Application US/0903456  
/ Patent No. 6677145  
/ GENERAL INFORMATION:  
/ APPLICANT: Abbott Laboratories  
/ APPLICANT: Mukerji, Pradip  
/ APPLICANT: Leonard, Amanda Eun-Yeong  
/ APPLICANT: Huang, Yung-Sheng  
/ APPLICANT: Peretia, Suzette L.  
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
/ FILE REFERENCE: 6407.US.93  
/ CURRENT APPLICATION NUMBER: US/09/903,456  
/ PRIOR FILING DATE: 2001-07-11  
/ PRIOR APPLICATION NUMBER: US 09/624,670  
/ PRIOR FILING DATE: 2000-07-24  
/ PRIOR APPLICATION NUMBER: US 09/379,095  
/ PRIOR FILING DATE: 1999-08-23

; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 7  
 ; LENGTH: 819  
 ; TYPE: DNA  
 ; ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-7

## Alignment Scores:

Pred. No.:	Score:	Percent Similarity:	Best Local Similarity:	Query Match:	Length:	Matches:	Conservative:	Mismatches:	Indels:	Gaps:
6,696-39	395.50	53.49%	36.43%	23.96%	819	94	44	100	20	6

US-09-624-670-64 (1-299) x US-09-903-456-7 (1-819)

```

QY 17 GlyProArg-AspThrArgVallysglyTTP-----PheLeuLeuAs 30
DB 33 GGGCCGGGAGAGACCGCGTGGACAGTGGATGGGCGCAAGCCGTACGACTCAC 92
QY 30 pAsnTyrIleProThrPheValCysSerValIle-----TyrLeuLe 44
DB 93 CGATGGGCTCCGATGATGAGCGTCCACCATCTGCGATTCGAGGTGGATACATGCG 152
QY 44 uIleValTrrPleuGlyProLysTyrMetLysAsn---ArgGlnProPheSerCysArgI 63
DB 153 CATGCTGCTCTTCCGACATCCGATCATGAGACATGAGAGAGCTTTTACGCTCAAGAC 212
QY 63 YlleuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPheTyrGlut 83
DB 213 CATCAAGCTCTTGACACACTGTTCTCTTCTGACCTTCCTGTACATGTCGCTGGAGAC 272
QY 83 uValThrGlyValTrrPleuGlyLysTyrAsnPhePheCysGlnGlyThrArgSerLacI 103
DB 273 CATCCGCAAGGCTATCTCCGAGGCTACAAAGTGTGGAAAAGACATGAGAGGCGCA 332
QY 103 YGluSerAspMetLys---IleIleArgValLeuTrrPrrTyrTyrPheSerLysLeuI 122
DB 333 CGAGTCTCATGCTCGAGGCTATGCTCGGATCGTACGTGTACGCTGTCCAAAGCATA 392
QY 122 eGluPheMetAspTrrPhePhePheIleLeuArgLysAsnAsnHisGlnIleThrVal 142
DB 393 CGAGTCTCATGCTCGAGGCTATGCTCGGATCGTACGTGTACGCTGTCCAAAGCATA 452
QY 142 uHisValTrrHisHisAlaThrMetLeuAsnIleTrrTrrPheValMetAsnTrrValPr 162
DB 453 GCATGTGTACACACATGCGACCATTTTGGCATCTGTGGGCTATGCCCAAGTACGCTCC 512
QY 162 oCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMetTyr 182
DB 513 AGGAGGTATGCGTACTTTCAGTATCCCTCACTTTCGTGACACCTCATGTATACCC 572
QY 182 TrrTyrGlyLeuSerSer-----IleProSerMetArgProTyrLeuTrrPrrLys 200
DB 573 ATACTACTTCTTCTCTCCCAAGGCTTCCGCTTGTATAGGCAATC-----AAGCC 623
QY 200 eTrrIleThrGlnGlyLeuValGlnPheValLeuThrIleIleGlnThrCysG 220
DB 624 GTACATCAACACACCTTCATGATGACCAAGTTCATGAGCAATGTGTGACAGCTTGTACGA 683
QY 220 yValPheTrrProCysSerPheProLeuGlyTrrPhePheGlnIleIleTyrMet 240
DB 684 CTACTCTTCCATGCGACTACCAAGGCTCTTGTGTACACTCTTGTGAGTGTACATGAT 743
QY 240 eSerLeuIleAlaLeuPheThrAsnPheTrrIleGlnThrTyrAsnLys 257
DB 744 CACCTTGTCTGCTTCTTCCGCAACTTTTGTGTGCAAGCATTTCTTAAG 795

```

RESULT 9

US-09-903-456-72

Sequence 72, Application US/09903456

Patent No. 6677145

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Leonard, Amanda Eun-Yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407 US P3

CURRENT APPLICATION NUMBER: US/09/903,456

CURRENT FILING DATE: 2001-07-11

PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 116

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 72

LENGTH: 819

TYPE: DNA

ORGANISM: *Thraustochytrium aureum*

US-09-903-456-72

## Alignment Scores:

Pred. No.:	Score:	Percent Similarity:	Best Local Similarity:	Query Match:	Length:	Matches:	Conservative:	Mismatches:	Indels:	Gaps:
6,696-39	395.50	53.49%	36.43%	23.96%	819	94	44	100	20	6

US-09-624-670-64 (1-299) x US-09-903-456-72 (1-819)

```

QY 17 GlyProArg-AspThrArgVallysglyTTP-----PheLeuLeuAs 30
DB 33 GGGCCGGGAGAGACCGCGTGGACAGTGGATGGGCGCAAGCCGTACGACTCAC 92
QY 30 pAsnTyrIleProThrPheValCysSerValIle-----TyrLeuLe 44
DB 93 CGATGGGCTCCGATGATGAGCGTCCACCATCTGCGATTCGAGGTGGATACATGCG 152
QY 44 uIleValTrrPleuGlyProLysTyrMetLysAsn---ArgGlnProPheSerCysArgI 63
DB 153 CATGCTGCTCTTCCGACATCCGATCATGAGACATGAGAGAGCTTTTACGCTCAAGAC 212
QY 63 YlleuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPheTyrGlut 83
DB 213 CATCAAGCTCTTGACACACTGTTCTCTTCTGACCTTCCTGTACATGTCGCTGGAGAC 272
QY 83 uValThrGlyValTrrPleuGlyLysTyrAsnPhePheCysGlnGlyThrArgSerLacI 103
DB 273 CATCCGCAAGGCTATCTCCGAGGCTACAAAGTGTGGAAAAGACATGAGAGGCGCA 332
QY 103 YGluSerAspMetLys---IleIleArgValLeuTrrPrrTyrTyrPheSerLysLeuI 122
DB 333 CGAGTCTCATGCTCGAGGCTATGCTCGGATCGTACGTGTACGCTGTCCAAAGCATA 392
QY 122 eGluPheMetAspTrrPhePhePheIleLeuArgLysAsnAsnHisGlnIleThrVal 142
DB 393 CGAGTCTCATGCTCGAGGCTATGCTCGGATCGTACGTGTACGCTGTCCAAAGCATA 452
QY 142 uHisValTrrHisHisAlaThrMetLeuAsnIleTrrTrrPheValMetAsnTrrValPr 162
DB 453 GCATGTGTACACACATGCGACCATTTTGGCATCTGTGGGCTATGCCCAAGTACGCTCC 512
QY 162 oCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMetTyr 182
DB 513 AGGAGGTATGCGTACTTTCAGTATCCCTCACTTTCGTGACACCTCATGTATACCC 572

```

QY 182 rTyrTyrGlyLeuSerSer-----1LeProSerMetArgProTyrLeuTyrTyrPlySly 200  
 Db 573 ATACTACTCTCTCTCTCCCAAGGCTTCGGGTTCGTAAGCAATC-----AAGCC 623  
 QY 200 sTyrTyrThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrThrGlySgl 220  
 Db 624 GTCATATACACACCTTTCATGATGACCCAGTTCATGCAATGCTGTGGCAGTCTTGTACGA 683  
 QY 220 yAlaPheTyrProCysSerPheProLeuGlyTyrPhePheGlnIleGlyTyrMetIle 240  
 Db 684 CTACCTCTTCCCATGGACATACCCACAGGCTCTTGTGGACGCTTGTGAGTGTACATGAT 743  
 QY 240 eSerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleValys 257  
 Db 744 CACCTTGCTTGGCTCTCTTGGCAACTTTTGTGTGACAGCTATCTTAAAG 795

## RESULT 10

US-09-903-456-73  
 / Sequence 73: Application US/09903456  
 / Patent No. 6677145  
 / GENERAL INFORMATION:  
 / APPLICANT: Abbott Laboratories  
 / APPLICANT: Mukerji, Pradip  
 / APPLICANT: Leonard, Amanda Eun-Yeong  
 / APPLICANT: Huang, Yung-Sheng  
 / APPLICANT: Perletra, Suzette U.  
 / TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 / FILE REFERENCE: 6407.US.P3  
 / CURRENT APPLICATION NUMBER: US/09/903,456  
 / CURRENT FILING DATE: 2001-07-11  
 / PRIOR APPLICATION NUMBER: US 09/624,670  
 / PRIOR FILING DATE: 2000-07-24  
 / PRIOR APPLICATION NUMBER: US 09/379,095  
 / PRIOR FILING DATE: 1999-08-23  
 / PRIOR APPLICATION NUMBER: US 09/145,828  
 / PRIOR FILING DATE: 1998-09-02  
 / NUMBER OF SEQ ID NOS: 116  
 / SOFTWARE: FastSeq for Windows Version 4.0  
 / SEQ ID NO 73  
 / LENGTH: 819  
 / TYPE: DNA  
 / ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-73

## Alignment Scores:

Pred. No.:	2,076-38	Length:	819
Score:	391.50	Matches:	92
Percent Similarity:	52.45%	Conservative:	47
Best Local Similarity:	34.72%	Mismatches:	107
Query Match:	23.71%	Indels:	19
DB:	4	Gaps:	6

US-09-624-670-64 (1-299) x US-09-903-456-73 (1-819)

QY 9 SerThrTyrPheLeuValaPheLeuGlyProArgAspThrArgValysGlyTyr----- 26  
 Db 10 AGCAGGCTGTGGATGTGTGTGGCCGCGTGGAGACCGGCTGTGACATGATGATGAT 69  
 QY 27 -----PheLeuLeuAspAsnTyrIleProThrPheValCysSerValIle---- 41  
 Db 70 GGGCCGCAAGCCGTACCACTCAACGATGGCTCCGATGATGATGATGATGATGATGAT 129  
 QY 42 -----TyrLeuLeuIleValITripLeuGlyProLysTyrMetLeuAsn--- 55  
 Db 130 GCATTGAGGTGGATATCATGCGCATGCTCTTCCGATCCGATCCGATATGAAAGCATG 189  
 QY 56 ArgGlnProPheSerCysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeu 75  
 Db 190 GAGAACCTTTTGTAGCTCAAGACATCAAGCTCTTGCACAACTGTTCTCTTGGCACTT 249  
 QY 76 SerLeuTyrMetCysPheTyrGlnLeuValITripLeuGlyValITripGlnGlyLysTyrAsnPhe 95  
 Db 250 TCCTTGTACTGTGCTGTGAGACATCCGCCAGGCTATCTTCGAGGCTTACAAAGTGT 309

QY 96 CysGlnGlyThrArgSerAlaGlyLysSerAspMetLys---1LeIleArgValLeuTyr 114  
 Db 310 GGAAGACATGAGGAGAAAGGACAGAGCTTCATGCTCAGGAGATGTCTGCATCTGATGAC 369  
 QY 115 TrpTyrTyrPheSerLysLeuIleGluPheMetAspThrPhePheIleLeuValys 134  
 Db 370 GTGTCTAGCGTTCACAGGATACAGAGTCTTGTGATCCGACATCATGATCTTGTGACG 429  
 QY 135 AsnAsnIleGlnIleThrValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyr 154  
 Db 430 AAGTTCACACAGGTTCTCTTCTTGTACCCGATCCACACATCCACCATTTTGGCATGTG 489  
 QY 155 TrpPheValMetAsnTyrValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSer 174  
 Db 490 TGGGCTATCGCCAGATACGCTCCAGAGGTATGATGATCTTTCATGATCATCACTCT 549  
 QY 175 PheIleHisValLeuMetLysSerTyrTyrGlyLeuSerSer-----1LeProSerMet 192  
 Db 550 TTGATGACACCGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 609  
 QY 193 ArgProTyrLeuTyrTyrTyrTyrTyrTyrTyrTyrTyrTyrTyrTyrTyrTyrTyr 212  
 Db 610 AAGCAATC-----AAGCCATATACACACCTTACATGACCCAGTTCATGCA 660  
 QY 213 ThrIleIleGlnThrThrCysGlyValPheTyrProCysSerPheProLeuGlyTyrPhe 232  
 Db 661 ATGCTTGTGACGCTCTGTATGACATGCTCTTCCATGACATGACATGACATGACATG 720  
 QY 233 PhePheGlnIleGlyTyrMetIleSerLeuIleAlaLeuPheThrAsnPheTyrIleGln 252  
 Db 721 CAGCTTCTTGGAGTGTATGATATGATGATGATGATGATGATGATGATGATGATGAT 780  
 QY 253 ThrTyrAsnIleValys 257  
 Db 781 AAGCTATCTTAAAG 795

## RESULT 11

US-09-621-976-12605  
 / Sequence 12605: Application US/09621976  
 / Patent No. 6639063  
 / GENERAL INFORMATION:  
 / APPLICANT: Dumas Milne Edwards, J.B.  
 / APPLICANT: Jobert, S.  
 / APPLICANT: Giordano, J.Y.  
 / TITLE OF INVENTION: ESTs and Encoded Human Proteins.  
 / FILE REFERENCE: GENSET.054PR2  
 / CURRENT APPLICATION NUMBER: US/09/621,976  
 / CURRENT FILING DATE: 2000-07-21  
 / NUMBER OF SEQ ID NOS: 19335  
 / SOFTWARE: Patent.pm  
 / SEQ ID NO 12605  
 / LENGTH: 377  
 / TYPE: DNA  
 / ORGANISM: *Homo sapiens*  
 US-09-621-976-12605

## Alignment Scores:

Pred. No.:	7,086-39	Length:	377
Score:	391.00	Matches:	71
Percent Similarity:	96.15%	Conservative:	4
Best Local Similarity:	91.03%	Mismatches:	3
Query Match:	23.68%	Indels:	0
DB:	4	Gaps:	0

US-09-624-670-64 (1-299) x US-09-621-976-12605 (1-377)

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValaPheLeuGlyProArgAsp 20  
 Db 144 ATGAACACTTTTGTAGTATGATCACTATGATCACTATGATCACTATGATCACTATGAT 203  
 QY 21 ThrArgValysGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40



Db 204 ACTAGAGTAAGAGGATGTTCTTCTGACCAATTATACCACTTATCTGCTCTGTC 263  
 Qy 41 ILeTyleuLeuIleValTTPLeuGlyProLySTyMeLysAsnArgInProPheSer 60  
 Db 264 ATATATTACTAATTGATGCTGGAGCCAAATATCATAGAGAAATAACAGCATCTCT 323  
 Qy 61 CyArGgLyIleuGInLeuTyraenLeuGlyLeuThrLeuLeuSerLeuTyf 78  
 Db 324 TGCCGGGGGATTTTAgTGtGTATASCTTGACCTGACCTGCTCTCTGAT 377

RESULT 12  
 US-09-903-456-70  
 ; Sequence 70, Application US/09903456  
 ; Patent No. 6677145  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407 US P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; CURRENT FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 70  
 ; LENGTH: 819  
 ; TYPE: DNA  
 ; ORGANISM: Thraustochytrium aureum  
 US-09-903-456-70

Alignment Scores:  
 Pred. No.: 2,75e-38 Length: 819  
 Score: 390.50 Matches: 94  
 Percent Similarity: 53.10% Conservative: 43  
 Best Local Similarity: 36.43% Mismatches: 101  
 Query Match: 23.65% Indels: 20  
 Gaps: 6

US-09-624-670-64 (1-299) x US-09-903-456-70 (1-819)

Qy 17 GLyProArg-AspThrArgVallysglyTTP-----PheLeuLeuAs 30  
 Db 33 GGGCCGGGTGGAGCCGGCGTGGAGCCAGTGGATGATGGCCGCAAGCCGTACGCACTAC 92  
 Qy 30 pAsnTyfIleProThrPheValCyseSerValIle-----TyfLeuLe 44  
 Db 93 CGATGGGCCCCCGCATGTAGTACGCTCCACCATCGTGGCATTCGAGTGGATACATGCGC 152  
 Qy 44 uIlleValTTPLeuGlyProLySTyMeLysAsn---ArgGlnProPheSerCyArGgl 63  
 Db 153 CATGCTGCTCTTCGGCATCCCGATCATGAGACGATGAGAGAGCCCTTTGAGACTCAAGAC 212  
 Qy 63 yIlleuGInLeuTyraenLeuGlyLeuThrLeuLeuSerLeuTyfMePheTyfGlyLe 83  
 Db 213 CATCAAGCTCTTGACAACTGTTCTTCTCGACCTTTCTGTACATGTGGTGGAGAC 272  
 Qy 83 uValThrGlyValTTPLeuGlyProLySTyraenPhePheCyseGlnGlyThrArgSerAlaGl 103  
 Db 273 CATCCGCGAGGCTATCTCTCGAGGCTACAAAGTGTGGAAAGCATGAGAGAGGCGCA 332  
 Qy 103 yGlnSerAspMetLys---IleIleArgValLeuTTPTyfTyfPheSerLeuLeuI 122  
 Db 333 CGAGTCTCATGCTTACGGAGCATGTCTGCGATGtGTACGGCGTCTACGTCTCCAAAGGCA 392  
 Qy 122 eGlnPheMetAspThrPhePhePheIleLeuArgLysAanAsnHsGlnIleThrValle 142

Db 393 CGAGTCTTGATATACCGCATCATATCTTTGCAAGAAAGTTCACACAGGTTCTCTT 452  
 Qy 142 uHsValTyfHsHsAlaThrMeLysAsnIleTyfTyfPheValMetAsnTTPValPr 162  
 Db 453 GCATGTGTACCAACCATATGCGACCATTTTGGCATCTGGGGGCTATTCGCAAGTACGCC 512  
 Qy 162 oCyseGlyHsSerTyfPheGlyAlaThrLeuAsnSerPheIleHsValleMetTyfSe 182  
 Db 513 AGAGGTATATGCGTACTTTTTCAGTATCTCACTTTCTGTCACACCGCATGTACGC 572  
 Qy 182 rTyfTyfGlyLeuSerSer-----IleProSerMetArgProTyfLeuTyfTyfLy 200  
 Db 573 ATACTACTTCTTCTCTCCCAAGGTTGGGTTGCGTGAAGCAATC-----AAGCC 623  
 Qy 200 sTyfIleThrGlnGlyInLeuValGlnPheValLeuThrIleIleGlnThrTyfGyl 220  
 Db 624 GTACATCACACCTTCATATACCAAGCTTCATGGAATGCTTGACGTCTTGATACGA 683  
 Qy 220 yValPheTyfProCyseSerPheProLeuGlyTyfPhePheGlnIleGlyTyfMetI 240  
 Db 684 CTACCTCTTCCATGCGATGCACTACCAAGGCTCTTGCAAGCTTCTTGAGTGTATCATAT 743  
 Qy 240 eSerLeuIleAlaLeuPheThrAsnPheTyfIleGlnThrTyraenLySyls 257  
 Db 744 CACCTGCTTGCCCTCTTCGCAACTTTTGTGTGACAGCTATCTTAAAG 795

RESULT 13  
 US-09-903-456-71  
 ; Sequence 71, Application US/09903456  
 ; Patent No. 6677145  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407 US P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; CURRENT FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 71  
 ; LENGTH: 818  
 ; TYPE: DNA  
 ; ORGANISM: Thraustochytrium aureum  
 US-09-903-456-71

Alignment Scores:  
 Pred. No.: 4,82e-38 Length: 818  
 Score: 388.50 Matches: 93  
 Percent Similarity: 53.10% Conservative: 44  
 Best Local Similarity: 36.05% Mismatches: 101  
 Query Match: 23.53% Indels: 20  
 Gaps: 6

US-09-624-670-64 (1-299) x US-09-903-456-71 (1-818)

Qy 17 GLyProArg-AspThrArgVallysglyTTP-----PheLeuLeuAs 30  
 Db 32 GGGCCGGGTGGAGACGCGTGGAGCCAGTGGATGATGGCGCAAGCCGTACGCACTAC 91  
 Qy 30 pAsnTyfIleProThrPheValCyseSerValIle-----TyfLeuLe 44  
 Db 92 CGATGGGCTCCGATGATGAGACGTGTACCACTGCTGGCAATTCAGAGTGGATATACATGCG 151

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Qy      44 uileValTrpLeuGlyProLysTyrMetLysAsn---ArgGlnProPheSerCysArgG1 63
Db      152 CATGCTGCTCTTGGCATCCCGATCATGAAGCATGAGAAAGCCCTTTGAGCTCAAGAC 211
Qy      63 ylleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPheTyrGluLe 83
Db      212 CATCAAGCTCTTGACACACTGTTTCTCTTGGACCTTCTCTGTCATGTCGTGGAGAAC 271
Qy      83 uValThrGlyValTrpGluGlyLysTyrAsnPhePheCysGlnGlyThrArgSerAlaG1 103
Db      272 CATCCGCCAGCATATCCTCGAGGCTACAAAGTGTGGAAACGACATGAGAAAGGCCAA 331
Qy      103 yGluSerAspMetLys---llelleArgValLeuTrpTyrTyrPheSerLysLeu11 122
Db      332 CGAGTCTCATGCTCAGGAGCATGTCGTCATCGTACGTCCTTCTCAAGTCCAGGCTA 391
Qy      122 eGluPheMetAspThrPhePhePheIleLeuArgLysAsnAsnHISGlnIleThrValle 142
Db      392 CGAGTCTCTGATACCGCCATCATGATCCTTTCAGAGAGATTCAACACAGGTTTCTTCTT 451
Qy      142 uHISValTyrHISAlaThrMetLeuAsnIleTPTTPheValMetAsnTrpValPr 162
Db      452 CGAAGTATACCAACCAATGCAACATTTTGGCATGTGGTGGCTATGCGCAAGTACGCTCC 511
Qy      162 oCysGlyHISerTyrPheGlyValaThrLeuAsnSerPheIleHISValLeuMetTyrSe 182
Db      512 AGGAGGTGATGCGGACTTTTCACTGATTCCTCAACTCTTTCGTGACACCGCATGTATAGC 571
Qy      182 rTyrTyrGlyLeuSerSer-----lleProSerMetArgProTyrLeuTrpTyrLys 200
Db      572 ATACTACTTCTTCTCTCCGCCAAGGTTGCGGTTGCGAAGCCAAATC-----AAGCC 622
Qy      200 sTyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIlelleGlnThrThrCysG1 220
Db      623 GTCATACCAACCCCTTCAGATGACGCCAGTTTCATGGAATGCTTGAGAGTCTCTGTAGCA 682
Qy      220 yValPheTrpProCysSerPheProLeuGlyTrpLeuPhePheGlnIleGlyTyrMet11 240
Db      683 CTACCTCTTCCCATGACCATCCACAGGCTCTTGTGACAGCTCTTGTGAGTATACATAT 742
Qy      240 eSerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnLysLys 257
Db      743 CACTTGTCTGCTCTCTTGGCAACTTTTGTGACAGCTATCTTAAG 794

RESULT 14
US-09-903-456-69
; Sequence 69, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 69
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
US-09-903-456-69
Alignment Scores:

```

```

Pred. No.:      8, 51e-38
Score:          286.50
Percent Similarity: 53.10%
Best Local Similarity: 36.05%
Query Match:    23.41%
DB:             4
Gaps:           6

US-09-624-670-64 (1-299) x US-09-903-456-69 (1-819)

Qy      17 GLYPROARG-AspThrArgValLysGlyTyr-----PheLeuLeuAs 30
Db      33 GGGCCGCGTGAGAGCCGCGGTGACCACTGATGATGAGCGCCAAAGCCGTACGACATCAC 92
Qy      30 pSerTyrIleProThrPheValCysSerValIle-----TyrLeuLe 44
Db      93 CGATGGGCTCCCGATGATGAGAGTGTCCACCATGTCGATCGAGTGGATGATCATAGGC 152
Qy      44 uileValTrpLeuGlyProLysTyrMetLysAsn---ArgGlnProPheSerCysArgG1 63
Db      153 CATGCTGCTCTTGGCATCCCGATCATGATGAGAGAGCCCTTTGAGCTCAAGAC 212
Qy      63 ylleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPheTyrGluLe 83
Db      213 CATCAAGCTCTTGACACACTGTTTCTCTTGGACCTTCTCTGTCATGTCGTGGAGAC 272
Qy      83 uValThrGlyValTrpGluGlyLysTyrAsnPhePheCysGlnGlyThrArgSerAlaG1 103
Db      273 CATCCGCCAGCATATCCTCGAGGCTACAAAGTGTGGAAACGACATGAGAAAGGCCAA 332
Qy      103 yGluSerAspMetLys---llelleArgValLeuTrpTyrTyrPheSerLysLeu11 122
Db      333 CGAGTCTCATGCTCAGGAGCATGTCGATGTCGTACGTCGTCGCTGTCAGAGCATTA 392
Qy      122 eGluPheMetAspThrPhePhePheIleLeuArgLysAsnAsnHISGlnIleThrValle 142
Db      393 CGAGTCTTGTGATACCGCATCATGATTCCTTTCAGAGAGTCAACAGGTTCTCTTCTT 452
Qy      142 uHISValTyrHISAlaThrMetLeuAsnIleTPTTPheValMetAsnTrpValPr 162
Db      453 GCAITGTATCCACATGACCATATTTTGCATGCGGCTATGCGCAAGTACGCTCC 512
Qy      162 oCysGlyHISerTyrPheGlyValaThrLeuAsnSerPheIleHISValLeuMetTyrSe 182
Db      513 AGGAGGTGATGCGGACTTTTCACTGATTCCTCAACTCTTTCGTGACACCGCATGTAGC 572
Qy      182 rTyrTyrGlyLeuSerSer-----lleProSerMetArgProTyrLeuTrpTyrLys 200
Db      573 ATACTACTTCTTCTCTCCGCCAAGGTTGCGGTTGCGAAGCCAAATC-----AAGCC 623
Qy      200 sTyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIlelleGlnThrThrCysG1 220
Db      624 GTCATACCAACCCCTTCAGATGACGCCAGTTTCATGGAATGCTTGAGAGTCTCTGTAGCA 683
Qy      220 yValPheTrpProCysSerPheProLeuGlyTrpLeuPhePheGlnIleGlyTyrMet11 240
Db      684 CTACCTCTTCCCATGACCATCCACAGGCTCTTGTGACAGCTCTTGTGAGTATACATAT 743
Qy      240 eSerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnLysLys 257
Db      744 CACTTGTCTGCTCTCTTGGCAACTTTTGTGACAGCTATCTTAAG 795

RESULT 15
US-09-903-456-74
; Sequence 74, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US P3

```

CURRENT APPLICATION NUMBER: US/09/903,456  
 CURRENT FILING DATE: 2001-07-11  
 PRIOR APPLICATION NUMBER: US 09/624,670  
 PRIOR FILING DATE: 2000-07-24  
 PRIOR APPLICATION NUMBER: US 09/379,095  
 PRIOR FILING DATE: 1999-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 116  
 SOFTWARE: FASTSEQ for Windows Version 4.0  
 SEQ ID NO 74  
 LENGTH: 819  
 TYPE: DNA  
 ORGANISM: Thraustochytrium aureum  
 US-09-903-456-74

## Alignment Scores:

Pred. No.:	1,136-37	Length:	819
Score:	385.50	Matches:	92
Percent Similarity:	53.10%	Conservative:	45
Best Local Similarity:	35.66%	Mismatches:	101
Query Match:	23.35%	Indels:	20
DB:	4	Gaps:	6

US-09-624-670-64 (1-239) x US-09-903-456-74 (1-819)

```

QY 17 GIProArg-AspThrArgValLysGlyTTP-----PheLeuLeuAs 30
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 33 GGGCCGCGTGAAGACCGCGCTGGACCACTGATGGCGCCAGCCGTACCACTCAC 92
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 30 pAsnTyrIleProThrPheValCysSerValIle-----TyrLeuLe 44
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
Db 93 CGATGGGCTCCCGATGATGACGATGCACCATGCTGCATTCGAGGTGGATACATGGC 152
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 44 uIleValTyrLeuGlyProLysTyrMetLysAsn--ArgGlnProPheSerCysArgG 63
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
Db 153 CATGGTCTCTTGGCATCCGATCCAGATCAGGACAGATGAGAGAGCTTTGAGCTCAAGAC 212
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 63 yIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPheTyrGluLe 83
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 213 CATCAAGCTCTTGCAACACTGTTCTCTTCTCGACCTTCTTGACATGTGCGTGGTGAC 272
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 83 uValThrGlyValTyrGluGlyLysTyrAsnPhePheCysGlnGlyThrArgSerAlaG 103
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
Db 273 CATCCGCGAGCTATCTTGGAGGCTACAAAGTGTGGAAACGACATGAGAGAGGCA 332
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 103 yGlnSerAspMetLys---IleIleArgValLeuTyrTyrTyrPheSerLysLeuI 122
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 333 CGAGTCTCATGTCTAGGGCATGTCTCGCATGTGTACGTGTCTACGTGTCCAAAGCAT 392
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 122 eGlnPheMetAspThrPhePhePheIleLeuArgLysAsnAsnIleGlnIleThrValLe 142
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
Db 393 CGAGTCTTGTGATACCGCATCATGATCTTTCAGAGAGTTCACACAGGTTCTCTT 452
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 142 uHisValTyrHisHisAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyrValPr 162
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 453 GCATGTGTACCAACCATGACCACTTTTGGCATCTGGAGGCTTATGCCCAAGTACGCTCC 512
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 162 oCysGlnHisSerTyrPheGlnAlaThrLeuAsnSerPheIleHisValLeuMetTyrSe 182
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
Db 513 AGGAGGTGATGGGTACTTTCAGATGATCTCACTCTTTCGTGACACCGCATGTACG 572
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 182 rTyrTyrGlyLeuSerSer-----IleProSerMetArgProTyrIleuTyrTyrIlySly 200
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
Db 573 ATACTACTTCTTCTCTCCCAAGGTTTCGGGTTTCGAGGCCAATC-----AAGCC 623
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 200 eTyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrThrCysG 220
   ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 624 GTACATCACACCCCTTCAGATGACCCAGATTATGCAATGCTTGTGCAATGCTTGTACGA 683
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
QY 220 yValPheTyrProCysSerPheProLeuGlyTyrLeuPhePheGlnIleGlyTyrMetI 240
   ::::: ::::: ::::: ::::: ::::: ::::: ::::: ::::: :::::
Db 684 CTACCTCTTCCCATGCACTACCAACAGGCTCTTGTGACGCTTCTTGAGTGTACATGAT 743

```

QY 240 eSerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnLys 257  
 Db 744 CACCTTGCTTGCCTCTTTCGGCAACTTTTGTGACAGCTATCTTAAAAAG 795

Search completed: April 1, 2004, 10:47:57  
 Job time : 82.9239 secs



US-09-624-670-63 (1-292) x US-09-903-456-5 (1-879)

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QY      1 MergUlnLeuLysAlaPheAspAsnGluValAlaAlaPheLeuAspAsnMetPheGly 20
Db      1 ATGGAGCAGCTGAGAGCCCTTGTATATAGAGCAATGGCTTTCTGGACAAATGTTTGA 60
QY      21 ProArgAspSerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIle 40
Db      61 CCACGAGATTCTCGAGTTCCGGGGGTTCCCTGGCGACTTCTTACCTTCCCACTTATC 120
QY      41 LeuThrIleThrTyrLeuLeuSerIleTyrLeuGlyAsnLysTyrMetLysAsnArgPro 60
Db      121 CTCACCATCAGTACCTGCTCTCGATATGGCTGGGTAAACAATGATCAAGAAACAGGCTT 180
QY      61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80
Db      181 GCTCTGCTCTCAGGGGACCTCTCACTTGTATACCTCGAAATCACCTTCTTCTGCG 240
QY      81 TyrMetLeuValGluLeuIleLeuSerSerTyrGlyTyrAsnLeuGlnCysGln 100
Db      241 TATATGCTGTGAGAGCTCATCTCTCCAGCTGGAGAGAGGTTCAACTTGCAGTGCAG 300
QY      101 AsnLeuAspSerAlaGlyGluGlyAspValArgValAlaLysValLeuTyrTyrTyr 120
Db      301 AATCTGACAGTGCAGAGAGAGATGATGTCGGGTAGCCAGAGCTTGTGTGTACTAC 360
QY      121 PheSerLeuLeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsn 140
Db      361 TTCTCCAACTAGTGAAGTTCCTGGACAGATTTCTTGTCTACGAAAAAACAACAT 420
QY      141 GlnIleThrPheLeuHisValTyrHisHisAlaSerMetPheAsnIleTyrTyrCysVal 160
Db      421 CAGATCACTCTCTTCATGTCATACCAACGCGCTCAGTTCACATCTGTGTGTGTT 480
QY      161 LeuAsnTyrIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHis 180
Db      481 TGAAGTGAATACCTGTGTGTGTCAGAGCTTCTTGAACCCACCTGAACAGCTTATCTAC 540
QY      181 IleLeuMetTyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTyr 200
Db      541 ATCTCATGTATACCTCTACCTACGCGCTGTGTGTGTCCTGCTCATGCAATACCTTTGG 600
QY      201 TyrLeuLeuTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThr 220
Db      601 TGAAGAGTACTCTCAACAGGCTCAGCTGTGCTGCTGTCATCACCATACCAACGACG 660
QY      221 LeuSerAlaValValLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer 240
Db      661 CTGAGTGCCTGTGTAAGCCCTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTTCC 720
QY      241 TyrMetMetThrLeuValIleLeuPheLeuAsnProTyrIleGlnThrTyrArgLysLys 260
Db      721 TATATATGATGCGTGTGTCATCTCTTAACTTAACTTAACTTAACTTAACTTAACTTAA 780
QY      261 ProValLysLeuGlnGlnLeuGlnLysGluValLysAsnGlyPheProLysAlaHisLeu 280
Db      781 CAGGTAGAGAAAGAGCTGCAAGAGAAAGAAAGAAAGAAAGTTCCTCCCAAGCCACCTTA 840
QY      281 IleValAlaAsnGlyMetThrAspLysLysAlaGln 292
Db      841 ATGTGGCTAATGGCATGACGAGCAAGAGGCTCAA 876

```

# RESULT 2

US-09-903-456-6  
Sequence 6 Application US/09903456  
Patent No. 6677145

## GENERAL INFORMATION:

APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradiip  
APPLICANT: Leonard, Amanda Sun-Yeong  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Pereira, Suresh L.  
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

```

; FILE REFERENCE: 6407 US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11 09:03:45
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 115
; SOFTWARE: fastseq for windows Version 4.0
; SEQ ID NO: 6
; LENGTH: 900
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-903-456-6

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## Alignment Scores:

```

Pred. No.: 1,72e-103 Length: 900
Score: 956.50 Matches: 168
Percent Similarity: 71.58% Conservative: 36
Best Local Similarity: 58.95% Mismatches: 78
Query Match: 61.04% Indels: 3
Dbs: 4 Gaps: 1

```

US-09-624-670-63 (1-292) x US-09-903-456-6 (1-900)

```

QY      4 LeuLysAlaPheAspAsnGluValAlaAlaPheLeuAspAsnMetPheGlyProArgAsp 23
Db      1 ATGGAGCAGTTCGATGCGTCACTCAGTACCTATTTCAAGCCCTTCCGGGCCCCGAGAT 60
QY      24 SerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIleLeuThrIle 43
Db      61 ACMAAGTCMAAGAGATGTTCTCTCTGCAAAATTAATCCCTTACGTTGTCTGTTCTGTT 120
QY      44 ThrTyrLeuLeuSerIleTyrPheGlyAsnLysTyrMetLysAsnArgProAlaLeuSer 63
Db      121 ATTATCTTACTATTTGATGCTGAGCCAAATATCATGAAGAACCGGACCGCTTCTCT 180
QY      64 LeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAlaTyrMetLeu 83
Db      181 TGCCAGGACATCTCGAGTGTATATACCTTGAACCTCCCTGCTCTCTCTCATGTTT 240
QY      84 ValGluLeuIleLeuSerSerTyrGlyGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103
Db      241 TATGAGTTCGAGCAGGTGTGTGAGAGGCAATACATTTTCTCCAGGAAACAGC 300
QY      104 SerAlaGlyGluGlyAspValArgValAlaLysValLeuTyrTyrTyrPheSerLys 123
Db      301 AGCGGGAGAAATCGATATAGATCATCGGCTCTGTGAGTCTCTCTCCAA 360
QY      124 LeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsnGlnIleThr 143
Db      361 CTCATGAGTATGAGACACTTTTCTTCACTCTTGGCAAGAACCAACACAGATCACC 420
QY      144 PheLeuHisValTyrHisHisAlaSerMetPheAsnIleTyrTyrCysValLeuAsnTyr 163
Db      421 GTCCTCATGTCACCAACGATCATGCTGTCGCTGTCGCTGTCGATGAGTCTG 480
QY      164 IleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIleLeuMet 183
Db      481 GTTCCCTCGGCACTTATTTGTGTGCGCATCAACAGCTTCATCCATCCATGCTCATG 540
QY      184 TyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTyrTyrLysLys 203
Db      541 TACTGTATATGTCGTCTCTCCATCCGTCATGCTGCTCCATACCTCTGTGTGAAAAAG 600
QY      204 TyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThrLeuSerAla 223
Db      601 TACATCACTCAAGGAGAGCTGTGCAAGTTGTGTGCAATTCACAGAGACCTGCGGG 660
QY      224 ValLysLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSerTyrMetMet 243

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Db      661 GCTCTCTGCGCATGCTCTCTCTCTGCGGCTGCTCTCTCCAGATGATGATGATT 720
Qy      244 ThrluValIleleuPheLeuAnpPheTyrlleGlnThrTyArglylsProVallys 263
Db      721 TCCCTGATGCTCTCTCTCAACAACCTTCACTTCACTTCAACAAGAGGCGCTCT 780
Qy      264 LysGluLeuGlnGluValLysAnGlyPheProlysaIah:stleuIleValaIa 283
Db      781 CGG-----AGGAAAGACCACCTGTAAGGCGCACCAAGACGGGCTGTGGCCGCTC 831
Qy      284 AenglyMetThrAsp 288
Db      832 AACGACACACCAAC 846

RESULT 3
US-09-769-863-21
; Sequence 21, Application US/09769863
; Patent No. 6635451
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; APPLICANT: Thurmond, Jennifer
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
; FILE REFERENCE: 6763, US 01
; CURRENT APPLICATION NUMBER: US/09/769, 863
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 914
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-769-863-21

Alignment Scores:
Pred. No.: 1,04e-101 Length: 914
Score: 941.50 Matches: 165
Percent Similarity: 72.73% Conservative: 43
Best Local Similarity: 57.69% Mismatches: 73
Query Match: 60.08% Indels: 5
Gaps: 2
DB: 4

US-09-624-670-63 (1-292) x US-09-769-863-21 (1-914)
Qy      4 LeuLysAlaPheAspAnGluValAsnAlaPheLeuAspAnMetPheGlyProArgAsp 23
Db      1 AAGGAACATTTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 60
Qy      24 SerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIleLeuThrIle 43
Db      61 ACTAAGCTAAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 120
Qy      44 ThrTyrLeuLeuSer-IleTyrPheGlyAsnLysTyrMetLysAsnArgProAlaLeuSer 63
Db      121 ATATATTACTAATTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 180
Qy      64 LeuArgGlyIleLeuThrluValPheLeuAlaIlePheLeuLeuSerAlaTyrMetLeu 83
Db      181 TCCCGGGGATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 240
Qy      84 ValGluLeuIleLeuSerSerTyrPheGlyValGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103
Db      241 TGTGAGTGTAGTAACAGAGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 300
Qy      104 SerAlaGlyGluGlyAspValArgValAlaValLeuTyrPheTyrPheSerLys 123
Db      301 ACCGGGAGGAGATCGATATGAGATTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 360
Qy      124 LeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsnGlnIleThr 143

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Db      361 CTGATAGATTTATGACACTTTCTTCTTCACTCGGAGAGAACACCAACGATGACAG 420
Qy      144 PheLeuHisValIleYrHisIleAlaSerMetPheAsnIleTyrTrpCysValLeuAsnTrp 163
Db      421 GTCCTGACACGCTTACACCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
Qy      164 IleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIleLeuMet 183
Db      481 GTCCCTCGCGCCACTTCTTATTTTGTGTCACACTTAATAGCTTCACTCACTGCTCAG 540
Qy      184 TyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTrpTyrLys 203
Db      541 TACTCTTACTATGATGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
Qy      204 TyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisIleLeuSerAla 223
Db      601 TACATCACTACGAGGCGGCTGCTTCACTTGTCTGTAACAATCAATCCAGACCACTCGGG 660
Qy      224 ValValLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSerTyrMetMet 243
Db      661 GTCATCTGGCGGTCGACATTCCTCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 720
Qy      244 ThrluValIleleuPheLeuAnpPheTyrlleGlnThrTyArglylsProVallys 263
Db      721 TCCCTGATGCTCTCTTCAACAACCTTCACTTCAACCTTCAACAAGAGGCGCTTCC 780
Qy      264 LysGluLeuGlnGlu---LysGluValLysAnGlyPheProlysaIah:stleuIleVal 282
Db      781 CGAGGAAAGACCACTGTAAGGACCAACGAGATGG-----TCCGTGCTGT 828
Qy      283 AlaAnGlyMetThrAsp 288
Db      829 GTGATGACACACCAAC 846

RESULT 4
US-09-903-456-3
; Sequence 3, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407, US 93
; CURRENT APPLICATION NUMBER: US/09/903, 456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624, 670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379, 095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145, 828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 914
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-903-456-3

Alignment Scores:
Pred. No.: 1,04e-101 Length: 914
Score: 941.50 Matches: 165
Percent Similarity: 72.73% Conservative: 43
Best Local Similarity: 57.69% Mismatches: 73
Query Match: 60.08% Indels: 5
Gaps: 2
DB: 4

US-09-624-670-63 (1-292) x US-09-903-456-3 (1-914)
Qy      4 LeuLysAlaPheAspAnGluValAsnAlaPheLeuAspAnMetPheGlyProArgAsp 23

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Db 1 ATGGAACATTTTGCATGACCTAGTACCTATTTCACAGCACTGCTGAGCCCTTGAGAT 60  
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Db 61 ACTAGAGTAAAGAGTGGTTCTTCTGACCAATTATATACCACTTATCTGCTCTCTC 120  
Qy 44 ThrTyrLeuLeuSerIleTyrPheLeuGlyAsnLysTyrMetLysAsnArgProAlaLeuSer 63  
Db 121 ATATATTACTAATTGATGCTGGAGCCAAATACATAGAGATTAAGCACTTCTCT 180  
Qy 64 LeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAlaTyrMetLeu 83  
Db 181 TGCCGGGGGAAATTAGAGTGATTAACCTTGACCTCACTGCTGCTGTGATATGTTTC 240  
Qy 84 ValIleuLeuLeuSerSerTyrPheGlyGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103  
Db 241 TGTAGCTTAGTAAACAGAGATATGGAGAGCAATACAACTTCTTGTGACAGGCAACAGC 300  
Qy 104 SerAlaGlyGlnGlyAspValArgValAlaIleValIleValLeuTyrTyrTyrPheSerLys 123  
Db 301 ACCGAGAGAAATAGATAGATAGAAATTATCCGTCCTCTGCTGACTACTTCTCCAA 360  
Qy 124 LeuValIlePheLeuAspThrIlePhePheValIleuArgLysLysThrAsnGlnIleThr 143  
Db 361 CTCATAGAAATTATGACACTTCTTCTTCTATCTCTGCGAAGAACACACACAGATCAGC 420  
Qy 144 PheLeuIleValTyrHisIleAsnSerMetPheAsnIleTyrTrpCysValLeuAsnTrp 163  
Db 421 GTCTGCAAGCTTACCAACCAATGCTGATGCTGAGCAATCTGGTGTTGTGTGATGATG 480  
Qy 164 IleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleIleLeuMet 183  
Db 481 GTCCCTGCGGCGCCCTTATTTTGGGCACACTTAATAGCTTATTCACAGCTCTCATG 540  
Qy 184 TyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTrpTrpLys 203  
Db 541 TACTCTTACTATGTTGTGTCAGTCAGTCCTTCATCGCTACCTCTGCGGAGAGAG 600  
Qy 204 TyrLeuThrGlnIleValIleValIlePheValIleThrIleThrIleThrLeuSerAla 223  
Db 601 TACTACTACTAGGGCGAGCTGCTCACTTGTGCTCAATCATCAACACCGAGCGCGG 660  
Qy 224 ValValIleProCysGlyPheProPheGlyCysLeuIlePheGlnSerSerTyrMetMet 243  
Db 661 GTCACTCGCGCGGACATTCCTCTGTGTGTGTTGTATTTCCAGATTGATGATCACTAT 720  
Qy 244 ThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLysProValLys 263  
Db 721 TCCCTGATTGCTCTCTTCAACAACCTTCTTACATTCAGACCTTACAACAAGAGGCGCTCC 780  
Qy 264 LysGluLeuGlnGlu--LysGluValLysAsnGlyPheProLysAlaHisLeuIleVal 282  
Db 781 CGAAGAAAGACCACTGAGAGACCAACCAAGAAATGAGG-----TCCGTGCTGCT 828  
Qy 283 AlaAsnGlyMetThrAsp 288  
Db 829 GTGATGACACACACAC 846

RESULT 5  
US-09-149-476-258  
Sequence 258, Application US/09149476  
Patent No 6420526  
GENERAL INFORMATION:  
APPLICANT: Rosen et al.  
TITLE OF INVENTION: 186 Human Secreted proteins  
FILE REFERENCE: P2002P1  
CURRENT APPLICATION NUMBER: US/09/149,476  
CURRENT FILING DATE: 1998-09-08  
EARLIER APPLICATION NUMBER: PCT/US98/04493  
EARLIER FILING DATE: 1998-03-06  
EARLIER APPLICATION NUMBER: 60/040,162  
EARLIER FILING DATE: 1997-03-07

EARLIER APPLICATION NUMBER: 60/040,333  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/038,621  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,626  
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EARLIER FILING DATE: 1997-05-23  
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EARLIER FILING DATE: 1997-04-11  
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EARLIER FILING DATE: 1997-04-11  
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EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,569  
EARLIER FILING DATE: 1997-04-11  
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EARLIER APPLICATION NUMBER: 60/043,671  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,674  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,669  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,312





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Qy 100 GluAsnLeuAspSerAlaGlyIguLysP---ValArgValAlaValLeuTyrTrp 118
Db 373 GACCTGTGACATTTCACAGACCCCTGAGGCATTGAGTGGTGGCTGCTGCTC 432
Qy 119 TyrTyrPheSerIysLeuValGluPheLeuAspTrpIlePhePheValLeuArgLys 138
Db 433 TTCCTCTTCCAAAGTTCAATTGAGTGATGACACAGGATGATCTTATCTCCGAAGAAA 492
Qy 139 ThrAsnGlnIleThrPheLeuHisValTyrHisHisAlaSerMetPheAsnIleTyrTrp 158
Db 493 GACGGGCAAGGTGACCTTCTCACTGCTTCATCTGCTGCTGCTGCTGCTGCTGCTG 552
Qy 159 CysValLeuAsnTrpIleProCysGlyIleSerPhePheGlyProThrLeuAsnSerPhe 178
Db 553 TGGGGGGGTAAAGATTGCCCCGGAGGAATGGGCTCTTTCATGACCATATTAACCTTCC 612
Qy 179 IleHisIleLeuMetTyrSerTyrTyrGlyLeuSerValPhe---ProSerMetHisLys 197
Db 613 GTGCATGTCATTAATGATGACCTGACTACGATTAATCTGCTTGGCCCTGTGACCAACC 672
Qy 198 TyrLeuTyrTrpTyrLeuTyrTyrLeuThrGlnIleValGlnPheValLeuThrIle 217
Db 673 TACCTTTGGTGAAGAAAGACATGACGACCATTCAGCTGATCACTTCTCTGCTCA 732
Qy 218 ThrHis---ThrLeuSerAlaValValLysProCysGlyPheProPheGlyCysLeuIle 236
Db 733 CTGACATCTCCACAGTACTACTTATGTCAGCTGTAACCTACCATCCAGTCACTATTT 792
Qy 237 PheGlnSer---SerTyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGln 255
Db 793 CACCTCATCTGATGATGACCATCTTCTTCACTGCTTCTTCAACTCTGATGATAC 852
Qy 256 ThrTyrArgLys---LysProValLysLysGluLeuGlnIleValLysAsnGly 274
Db 853 TCTTATACCAAGGACGAGCGCTGCCCCGCTGACCTTCAGCA-----AATGA 900
Qy 275 PheProLysAlaHisLeuIleValAlaAsn 284
Db 901 GCTCCAGGATATGCCAAGTCACAGGCCAAC 930

RESULT 6
US-09-149-476-106
Sequence 106, Application US/09149476
Patent No. 6420526
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 186 Human Secreted proteins
FILE REFERENCE: P2002P1
CURRENT APPLICATION NUMBER: US/09/149,476
EARLIER APPLICATION NUMBER: PCT/US98/04493
EARLIER FILING DATE: 1998-03-06
EARLIER APPLICATION NUMBER: 60/040,162
EARLIER FILING DATE: 1997-03-07
EARLIER APPLICATION NUMBER: 60/040,333
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EARLIER APPLICATION NUMBER: 60/047, 614
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043, 578
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043, 576
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EARLIER APPLICATION NUMBER: 60/047, 501
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EARLIER FILING DATE: 1997-04-11
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EARLIER FILING DATE: 1997-08-22
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EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056, 881

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EARLIER FILING DATE: 1997-08-22
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EARLIER APPLICATION NUMBER: 60/049, 610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061, 060
EARLIER FILING DATE: 1997-10-02

Alignment Scores:
Pred. No.: 8,73e-45 Length: 1542
Score: 462.50 Matches: 102
Percent Similarity: 54.83% Conservative: 57
Best Local Similarity: 35.17% Mismatches: 118
Query Match: 29.51% Indels: 13
DB: 4 Gaps: 9

US-09-624-670-63 (1-292) x US-09-149-476-106 (1-1542)
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DB 107 GAGTCCTTACCCAGATGAGTGAGGCTGTGTGATGACTTGTACCAAGAGGTATG--AAGCAC 163
QY 22 ArgAspSerArgValArgGlyTyrPheLeuLeuAspSer-----TyrLeuProThrPhe 39
DB 164 GCAATGCCCGGAGNCCAGGGCTACCTCCTGATGGGGTCCCTGCTATATGACCTCAT 223
QY 40 IleLeuThrIleThrTyrLeuLeuSerIleTyrPheGlyAsnLeuTyrMetLeuAsnArg 59
DB 224 CTCCTGACCTTACGATGACTTGTGT--CTTCACCTGGGCTCGCATCTGCTATATCGG 280
QY 60 ProIleLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSer 79
DB 281 AAGCCCTTCAGCTCCGTGCTGCTTCATGATGCTTCACTTCACTGCTGACATCTCC 340
QY 80 AlaTyrMetLeuValGlnLeuIleLeuSerSerTyrPheGlyGlyTyrAsnLeuGlnCys 99
DB 341 CTCACATGCTCTATGATGATGCTTCTGATGCTGGGCTGGAGCAGCATTAACCTGGGCTGT 400
QY 100 GlnAsnLeuAspSerIleGlyGlnIleAsp--ValArgValAlaIleValLeuTyrPhe 118
DB 401 GACCTTGTGACTTATTCACACAGCCTTGAGGACCTTAGATGTTGGGTGGCTGGCTC 460
QY 119 TyrTyrPheSerTyrLeuValGlnPheLeuAspThrIlePhePheValLeuArgIleLys 138
DB 461 TTCCTTCTCCAAATGATGATGCTGATGAGGACAGCAGTATCTTATTTCCGAAGAAA 520
QY 139 ThrAsnGlnIleThrPheLeuHisValTyrHisAlaSerMetPheAsnIleTyrPhe 158
DB 521 GACGGGCAAGGTGACCTTCTTCACTGCTTCCATCACTCTGTGCTTCCCTGGAGCTGGG 580
QY 159 CysValLeuAsnTyrIleProCysGlyGlnSerPheGlyProThrLeuAsnSerPhe 178
DB 581 TGGGGGCTTAAGATGCGCCGGAGAGAAAGGGCTTTCATGACCATTAAGATCTTCC 640
QY 179 IleHisIleLeuMetTyrSerTyrTyrGlyLeuSerValPhe---ProSerMetHisLys 197
DB 641 GTGATGTCATTAATGATGACCTGATCAGGATATATGCTTGGCCCTGTGGACACACCC 700

```

QY 198 TyrLeuTrpTyrLysTyrLeuThrGlnAlaGlnLeuValGlnPheValIleuThrIle 217  
 Db 701 TACCTTGGTGAAGAAAGCATGACAGCATTCAGCTATCAGCTTGTCTCTGCTCA 760  
 QY 218 ThrHis---ThrLeuSerAlaValValLysProCysGlyPheProPheGlyCysLeuIle 236  
 Db 761 CTGCACATCTCCAGACTACTTATGTCAGCTGTACTACAGTACCACTCATTTAT 820  
 QY 237 PheGlnSer---SerTyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGln 255  
 Db 821 CACCTCATCTGATGATGACCATCTTCTTCATCTCTTCTCCAACTTCTGATATAC 880  
 QY 256 ThrTyrArgLys---LysProValLysLysGluLeuGlnGluLysGluValLysAsnGly 274  
 Db 881 TCTTATACCAAGGAGCAAGCGCTGCCCGCTGCACCTTCAGCAA-----AATGA 928  
 QY 275 PheProLysAlaHisLeuIleValAlaAsn 284  
 Db 929 GCTCCAGGATTTGCCAAGGTCAAGGCCAAC 958

## RESULT 7

US-09-023-655-430  
 ; Sequence 430, Application US/09023655  
 ; Patent No. 6607879

## GENERAL INFORMATION:

APPLICANT: Cocks, Benjamin G.

APPLICANT: Susan G. Stuart

APPLICANT: Jeffrey J. Seilhamer

TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE

NUMBER OF SEQUENCES: 1508

CORRESPONDENCE ADDRESS:

ADDRESS: INCYTE PHARMACEUTICALS, INC.

STREET: 3174 PORTER DRIVE

CITY: PALO ALTO

STATE: CALIFORNIA

COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/023,655

FILING DATE: HEREMITH

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Zeller, Karen J.

REGISTRATION NUMBER: 37,071

REFERENCE/DOCKET NUMBER: PA-0001 US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (650) 855-0555

TELEFAX: (650) 845-4166

INFORMATION FOR SEQ ID NO: 430:

SEQUENCE CHARACTERISTICS:

LENGTH: 1812 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

IMMEDIATE SOURCE:

LIBRARY: URETTUT01

CLONE: 1658706

US-09-023-655-430

## Alignment Scores:

Pred. No.: 3,82e-43 Length: 1812  
 Score: 449.50 Matches: 102

Percent Similarity: 54.64%  
 Best Local Similarity: 35.05%  
 Query Match: 28.69%  
 DB: 4 Gaps: 9

US-09-624-670-63 (1-292) x US-09-023-655-430 (1-1812)

QY 2 GIUglnLeuLysAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGlyPro 21  
 Db 433 GAGCTCTTGCCAGAGATGAGAGCTGTGTGTAACCTGTGTCACCAAGAGTGATG---AAGCAC 489  
 QY 22 ArgAspSerArg-ValArgGlyTyrPheLeuLeuAspSer-----TyrLeuProThrPhe 39  
 Db 490 GCAAGATCCCGGATCCAGGGCTACCTGTATGGGGGCCCCCTGTCAAGACCTCAT 549  
 QY 39 eIleLeuThrIleThrTyrLeuLeuSerIleTyrLeuLysAsnIleTyrMetLysAsnArg 59  
 Db 550 TCTCCGACCTACAGGTAAGTCTGTT---CTCTCACTTGGGCTCGGCATCATGGGTAATCG 606  
 QY 59 gProAlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeu 79  
 Db 607 GAAGCCCTTCAGCTCCGGCTTCATGATGTCTACAACTTCACACGTGGAGCACTCTC 666  
 QY 79 rAlaTyrMetLeuValGluLeuIleLeuSerSerTyrGluGlyTyrAsnLeuGlnC 99  
 Db 667 CCTTACATTTGCTCTGAGTCTCTGATGTGGGCTGCGTGCACACTTACTTGGCGCTG 726  
 QY 99 sGlnLeuAspSerAlaGlyGluGlyAsp---ValArgValAlaLysValLeuTyrPTr 118  
 Db 727 TGACCTGTGACCTATTCACAGCCCTGAGGCACTTATGATGTGGGCTGCGCTGCTG 786  
 QY 118 pTyrTyrPheSerLysLeuValGluPheLeuAspThrIlePhePheValLeuArgGly 138  
 Db 787 CTTCCTCTTCCAGTTCATGATGAGCTGATGACGACGATCTTATCTCCGAAAGAA 846  
 QY 138 sThrAsnGlnIleThrPheLeuHisValTyrHisIleAlaSerMetPheAsnIleTyr 158  
 Db 847 AGACGGCAGAGTACCTTCATGATGATGATGATGATGATGATGATGATGATGATG 906  
 QY 158 pCysValLeuAsnTyrPheProCysGlyGlnSerPhePheGlyProThrLeuAsnSer 178  
 Db 907 GTGGGGGTAAAGATGCCCCGGGAGATGGGCTTTCATGCCATGATAACTCTTC 966  
 QY 178 eIleHisIleLeuMetTyrSerTyrTyrGlyLeuSerValPhe---ProSerMetHis 197  
 Db 967 CGTGATGATCATATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1026  
 QY 197 sTyrLeuTrpTyrLysTyrLeuThrGlnAlaGlnLeuValGlnPheValIleuThr 217  
 Db 1027 CTACCTTGTGGAAGAAAGCATGACAGCATTCAGCTGATGATGATGATGATGATG 1086  
 QY 217 eThrHis---ThrLeuSerAlaValValLysProCysGlyPheProPheGlyCysLeu 236  
 Db 1087 ACTGCACATCTCCAGACTACTTATGTCAGCTGTACTACCAAGTACCAAGTACTAT 1146  
 QY 236 ePheGlnSer---SerTyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIle 255  
 Db 1147 TACCTCATCTGATGATGACCATCTTCTTCATGCTGTTCCTCCAACTTCTGATATCA 1206  
 QY 255 nThrTyrArgLys---LysProValLysLysGluLeuGlnGluLysGluValLysAsn 274  
 Db 1207 CTCTTATACCAAGGAGCAAGCGCTGCCCGCTGCACCTTACGAA-----AATGA 1254  
 QY 274 yPheProLysAlaHisLeuIleValAlaAsn 284  
 Db 1255 AGCTCCAGGATTTGCCAAGGTCAAGGCCAAC 1285

## RESULT 8

US-09-903-456-7  
 ; Sequence 7, Application US/09903456  
 ; Patent No. 6677145

GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories

/ APPLICANT: Mukerji, Pradip  
 / APPLICANT: Leonard, Amanda Eun-Yeong  
 / APPLICANT: Huang, Yung-Sheng  
 / APPLICANT: Pereira, Suzete L.  
 / TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 / FILE REFERENCE: 6407 US P3  
 / CURRENT APPLICATION NUMBER: US/09/903,456  
 / CURRENT FILING DATE: 2001-07-11  
 / PRIOR APPLICATION NUMBER: US 09/624,670  
 / PRIOR FILING DATE: 2000-07-24  
 / PRIOR APPLICATION NUMBER: US 09/379,095  
 / PRIOR FILING DATE: 1999-08-23  
 / PRIOR APPLICATION NUMBER: US 09/145,828  
 / PRIOR FILING DATE: 1998-09-02  
 / NUMBER OF SEQ ID NOS: 116  
 / SOFTWARE: FastSeq for Windows Version 4.0  
 / SEQ ID NO 7  
 / LENGTH: 819  
 / TYPE: DNA  
 / ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-7

Alignment Scores:  
 Pred. No.: 3,13e-38 Length: 819  
 Score: 403.50 Matches: 91  
 Percent Similarity: 52.96% Conservative: 52  
 Best Local Similarity: 33.70% Mismatches: 100  
 Query Match: 25.75% Indels: 27  
 Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-7 (1-819)

QY 16 Asphanmetpnehygpraxarapsersargvalarglytrp----- 29  
 Db 22 GATGATGTGGTGGCCCGCGTGAACCGCGCGTGAACGATGATGATGCGCCGAACCG 81  
 QY 30 Pheuleuapserserlyleuprthrphelleuthr-----11e 43  
 Db 82 TACGACCTCACCGATGGGCTCCGATGATGAGAGCTGTCACACATGCTGCATCGAGTGG 141  
 QY 44 Thrlytleuenseriletrpleuglyasnlystyrtelysasn--Argproalaleu 62  
 Db 142 GGAATACATGGCCATCTCTCTCTCGGATCCCGATCCGATGAGAGATGAGAACCTTTT 201  
 QY 63 SerleuargglyleuThrleuThyrAsnleualileThrleuenserAlatyMet 82  
 Db 202 GAGCTCAAGACCATCAAGCTTCTGACAACTTCTTCTCGGACTTCTTCTGTCATG 261  
 QY 83 leuValgluleuileuenserSertrpdluglylytyrAsnleuglncysglAsnleu 102  
 Db 262 TGGGTGAGACCATCCGCGCATCTCTCGAGGCTTACAAAGTTTGGAAACGACATG 321  
 QY 103 AspserralaglyuglyAspValarg---ValalalyValleuTrpTyrryrrphe 121  
 Db 322 GAGAAAGGCAACGAGTCTCATGCTCGAGGCGATGCTGCGCATCGTACGTTCTACG 381  
 QY 122 SerlyleuValgluPheleuAspThr1lephetheValleuarglystyrrAsn 141  
 Db 382 TCACAGGACATCGAGTTCTTGATACCGCATCATCATCTTTCACAAAGATTCAACAG 441  
 QY 142 1lethrPheleuHsVallyrHsHsAlaserMetPheAsn1letrpTyrryrrphe 161  
 Db 442 GTTCTCTTCTGACATGTTACCATCCAGCCATTTTGGCATCTGTGGAGCTATCGCC 501  
 QY 162 AsntrPlePheCysglyGlnserPhePheglyProthrleuAsnserPhe1leHs1le 181  
 Db 502 AAGTACGCTCCAGAGAGATGATGCGACTTTTCAGTATCTCACTCTTTCGTCACAC 561  
 QY 182 LeuMetlyrserlytyrGlyleuSer-----ValPheProserMet 195  
 Db 562 GTCATGTAAGCATCTACTTCTTCTCCCTCCCAAGAGGTTGGGTTGTAAGCAATC-- 618  
 QY 196 HslystyryleuTrpTrp1lelystyryleuThrGlnleuValGlnPheValleu 215

Db 619 -----DAGCGTACATACACACCTTCAATGACCACTTCAATGCGCA 660  
 QY 216 Thr1lethrHsThrleuSerAlaVallystyProCysglyPheProPheGlyCysleu 235  
 Db 661 ATGCTTGTGAGTCTGATGACATCACTTCCATCGGATGACCAAGAGCTCTTG 720  
 QY 236 1lephelinserserlyrMetMetThrleuVal1leleuPheleuAsnPhetr1leGln 255  
 Db 721 CAGCTCTTGAAGTGAATGATGATGATGATGATGATGATGATGATGATGATGATG 780  
 QY 256 ThrlyrAsnlystyryrProvallystyrysglu 265  
 Db 781 AGCTATCTTAAAGCCAAAGAGACCAAG 810

RESULT 9  
 US-09-903-456-72  
 / Sequence 72, Application US/09903456  
 / Patent No. 6677145  
 / GENERAL INFORMATION:

/ APPLICANT: Abbott Laboratories  
 / APPLICANT: Mukerji, Pradip  
 / APPLICANT: Leonard, Amanda Eun-Yeong  
 / APPLICANT: Huang, Yung-Sheng  
 / APPLICANT: Pereira, Suzete L.  
 / TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 / FILE REFERENCE: 6407 US P3  
 / CURRENT APPLICATION NUMBER: US/09/903,456  
 / CURRENT FILING DATE: 2001-07-11  
 / PRIOR APPLICATION NUMBER: US 09/624,670  
 / PRIOR FILING DATE: 2000-07-24  
 / PRIOR APPLICATION NUMBER: US 09/379,095  
 / PRIOR FILING DATE: 1999-08-23  
 / PRIOR APPLICATION NUMBER: US 09/145,828  
 / PRIOR FILING DATE: 1998-09-02  
 / NUMBER OF SEQ ID NOS: 116  
 / SOFTWARE: FastSeq for Windows Version 4.0  
 / SEQ ID NO 72  
 / LENGTH: 819  
 / TYPE: DNA  
 / ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-72

Alignment Scores:  
 Pred. No.: 3,13e-38 Length: 819  
 Score: 403.50 Matches: 91  
 Percent Similarity: 52.96% Conservative: 52  
 Best Local Similarity: 33.70% Mismatches: 100  
 Query Match: 25.75% Indels: 27  
 Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-72 (1-819)

QY 16 Asphanmetpnehygpraxarapsersargvalarglytrp----- 29  
 Db 22 GATGATGTGGTGGCCCGCGTGAACCGCGCGTGAACGATGATGATGCGCCGAACCG 81  
 QY 30 Pheuleuapserserlyleuprthrphelleuthr-----11e 43  
 Db 82 TACGACCTCACCGATGGGCTCCGATGATGAGAGCTGTCACACATGCTGCATCGAGTGG 141  
 QY 44 Thrlytleuenseriletrpleuglyasnlystyrtelysasn--Argproalaleu 62  
 Db 142 GGAATACATGGCCATCTCTCTCTCGGATCCCGATCCGATGAGAGATGAGAACCTTTT 201  
 QY 63 SerleuargglyleuThrleuThyrAsnleualileThrleuenserAlatyMet 82  
 Db 202 GAGCTCAAGACCATCAAGCTTCTGACAACTTCTTCTCGGACTTCTTCTGTCATG 261  
 QY 83 leuValgluleuileuenserSertrpdluglylytyrAsnleuglncysglAsnleu 102  
 Db 262 TGGGTGAGACCATCCCGCGCATCTCTCGAGGCTTACAAAGTTTGGAAACGACATG 321

Qy 103 AspSerAlaGlyIuGlyAspValArg---ValAlaLysValLeuTrpIleTyrPhe 121  
 Db 322 GAGAAAGGCAACGAGTCTCATGCTCGAGGCAATCTCGCATGATGACGTGTCTCACTG 381  
 Qy 122 SerIleuValGluPheLeuAspThrIlePhePheLeuIleuArgIleuThrAsnGln 141  
 Db 382 TCCAAGGCAATACGAGTCTTGATACCGCATCATCATCTTGCAAGAAAGTCAACAG 441  
 Qy 142 IleThrPheLeuHisValIleThrHisAlaSerMetPheAsnIleTrpIleValLeu 161  
 Db 442 GTTTCCTCTTGATGTGTACCAACCATCCGCTTTTGCCATCTGTGTGGCTATTCGC 501  
 Qy 162 AsnTrpIleProCysGlyIuGlnSerPhePheGlyProThrIleuAsnSerPheIleHisIle 181  
 Db 502 AAGTACGCTCCAGAGATGATGGTACTTTTCAGTATCTCTCACTCTTCTGTGACAC 561  
 Qy 182 LeuMetIleuValGluLeuIleuSerPhePhePhePhePhePhePhePhePhePhe 195  
 Db 562 GTCATGTACGCACTACTCTCTCTCTCCCAAGGATCGGCTTCGTGAGCCAAATC--- 618  
 Qy 196 HisIleuValLeuTrpIleuValIleuValIleuValIleuValIleuValIleu 215  
 Db 619 -----AAGCGTACATACCAACCTTCAGATGACCACTTCATGCA 660  
 Qy 216 ThrIleThrHisThrLeuSerAlaValIleuProCysGlyPheProPheGlyCysIleu 235  
 Db 661 ATGCTGTGACAGTCTTGATGAGTACTCTCTCCCATGAGCAACCAAGGCTCTTGTG 720  
 Qy 236 IlePheGlnSerIleuMetMetThrLeuValIleuPheLeuAsnIleuValIleu 255  
 Db 721 CAGCTCTTGAGATGTACATGATACCTTGCTGCTCTGCGCAACTTTTGTGAC 780  
 Qy 256 ThrIleuValIleuValIleuValIleuValIleuValIleuValIleuValIleu 265  
 Db 781 AGCTATCTTAATAAAGCCAAAGAGAGAGAG 810

RESULT 10  
 US-09-903-456-70  
 ; Sequence 70, Application US/09903456  
 ; Patent No. 6677145  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407 US P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; CURRENT FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 115  
 ; SOFTWARE: FASTSEQ for Windows Version 4.0  
 ; SEQ ID NO 70  
 ; LENGTH: 819  
 ; TYPE: DNA  
 ; ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-70

Alignment Scores:  
 Pred. No.: 5,39e-38 Length: 819  
 Score: 401.50 Matches: 92  
 Percent Similarity: 52.38% Conservative: 51  
 Best Local Similarity: 33.70% Mismatches: 97  
 Query Match: 25.62% Indels: 33  
 DB: 4 Gaps: 7

US-09-624-670-63 (1-292) x US-09-903-456-70 (1-819)

Qy 16 AspAsnMetPheGlyProArgAspSerArgValArgGlyTyrPheLeuLeuAspSerTyr 35  
 Db 22 GATGATGTGTGTGGCCGCGCTGGAGACCGGCGGTGACCACTGCG-----ATGGATGGCC 75  
 Qy 36 LeuProThrPheIleuThr----- 42  
 Db 76 AAGCCG---TAAGCACTACACGATGGGCCCGCATGATGACGTGTCCACCATGCTGGCA 132  
 Qy 43 -----IleThrTyrIleuSerIleTrpLeuGlyAsnIleuValIleuValIleuVal 59  
 Db 133 TTGAGAGTGGATACATGCGCATGCTGCTCTGCGCATCCGATCAAGACAGATGAG 192  
 Qy 60 ProAlaLeuSerIleuValIleuThrIleuValIleuValIleuValIleuValIleu 79  
 Db 193 AAGCTTTGAGCTCAAGACATCAAGCTCTTGCAACAATTGTTCTTGGACTTCC 252  
 Qy 80 AlaTyrMetIleuValGluLeuIleuSerSerTrpGlyIleuValIleuValIleuVal 99  
 Db 253 TTGTACATGTGCTGGAGACCATCCGCAAGCTATCTCGAGGCTACAAAGTGTGGA 312  
 Qy 100 GlnAsnLeuAspSerAlaGlyIuGlyAspValArg---ValAlaLysValLeuTrpIle 118  
 Db 313 AACGACATGAGAGAGGCAACAGTCTCATGCTCGAGGCAATCTCGCATGCTGTACCG 372  
 Qy 119 TyrTyrPheSerIleuValGluPheLeuAspThrIlePhePheValIleuArgIleu 138  
 Db 373 TTCTAGGTGTCCAAAGCATACAGATCTTGATACCGCATCATCATCTTTGCAAGAG 432  
 Qy 139 ThrAsnGlnIleThrPheLeuHisValIleThrHisAlaSerMetPheAsnIleTrpIle 158  
 Db 433 TTCACACAGGTTCTCTTGATGATGTACCAACATGCAACCATTTTGGCATCTGTGG 492  
 Qy 159 CysValIleuAsnTrpIleProCysGlyIuGlnSerPhePheGlyProThrIleuAsnSer 178  
 Db 493 GCTATGCGCAAGTACGCCGCCAGAGATGATGCTTTTCAATGATCTCAACTCTTC 552  
 Qy 179 IleHisIleLeuMetIleuSerIleuValIleuValIleuValIleuValIleuVal 192  
 Db 553 GTGACACCGCTCATGTACCATACATCTCTCTCTCCCAAGGTTGGGCTCGTGAAG 612  
 Qy 193 ProSerMetHisIleuValIleuValIleuValIleuValIleuValIleuValIleu 212  
 Db 613 CCATC-----AAGCGTACATACCAACCTTCAGATGACCAAG 651  
 Qy 213 PheValIleuThrIleThrHisThrLeuSerAlaValIleuProCysGlyPheProPhe 232  
 Db 652 TTATGCAATGCTGTGCACTCTTGATGAGTACTACTCTTCCCATGAGCACTACCAAG 711  
 Qy 233 GlyCysLeuIlePheGlnSerIleuMetMetThrLeuValIleuPheLeuAsnIle 252  
 Db 712 GCTCTTGTGAGCTTTTGAGATGTCATGATCACTGCTGCTCTTGGCACTTT 771  
 Qy 253 TyrIleGlnThrTyrArgIleuValIleuValIleuValIleuValIleuValIleu 265  
 Db 772 TTGTGTGAGGATATCTTAATAAAGCCAAAGAGAGAG 810

RESULT 11  
 US-09-903-456-73  
 ; Sequence 73, Application US/09903456  
 ; Patent No. 6677145  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407 US P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; CURRENT FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095  
 PRIOR FILING DATE: 1999-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 116  
 SOFTWARE: FASTSEQ for Windows Version 4.0  
 SEQ ID NO 73  
 LENGTH: 819  
 TYPE: DNA  
 ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-73

Alignment Scores:  
 Pred. No.: 9-296-38 Length: 819  
 Score: 399.50 Matches: 92  
 Percent Similarity: 52.43% Conservative: 48  
 Best Local Similarity: 34.46% Mismatches: 99  
 Query Match: 25.49% Indels: 28  
 DB: 4 Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-73 (1-819)

```

QY      20  G1YPRoAaPSeRrAaG-ValArgG1YrP-----PheLeuLeuAs 33
      |||||
DB      33  GGGCCGCGTGAAGACCGGCGTGAACCAAGTGAAGCGCCAGCCGTAACCTCAC 92
      |||||
QY      33  pSerYrLeuProThrPheLeuLeuThr-----lleThrYrLeuLe 47
      |||||
DB      93  CGATGGGCTCCCGATGATGATGACGATGCCATGCTGCTGAGGTGGATACAGGC 152
      |||||
QY      47  useR1leTrrPleuG1yAnLysYrMetLysAsn---ArgProAlaLeuSerLeuArg1 66
      |||||
DB      153  CATGCTGCTTCGGCATCCGATCATGAAGACATGAGACGCTTTAGAGCTCAAGAC 212
      |||||
QY      66  Y1leLeuThrLeuYrAnLeuAla1leThrLeuLeuSerAla1YrMetLeuValGluLe 86
      |||||
DB      213  CATCAAGCTCTTGACCAACTGTTCTTCTTCGACCTTCTTGACATGTCGCTGAGAC 272
      |||||
QY      86  u1leLeuSerSerTrpG1uG1yG1YrAsnLeuGlnCysGlnAsnLeuAspSerAlaG1 106
      |||||
DB      273  CATCCGCGAGGCTATCCCTCGAGAGCTCAAAAGTTTGAAGACATGAGAAAGGCA 332
      |||||
QY      106  YG1uG1yAspValArg---ValAlaLysValLeuTrpYrYrYrPheSerLysLeuVa 125
      |||||
DB      333  CGAGTCTCATGCTGACGAGGATGCTCGCATGCTGATGCTGATGCTGCTGCTGCTG 392
      |||||
QY      125  lG1uPheLeuAspThr1lePhePheValLeuArgLysLysThrAsnGln1leThrPheLe 145
      |||||
DB      333  CGAGTCTCATGCTGACGAGGATGCTCGCATGCTGATGCTGATGCTGCTGCTGCTG 452
      |||||
QY      145  uH1seValYrH1sh1sa1seMetPheAsn1leTrrPrrPrrPrrPrrPrrPrrPrrPrr 165
      |||||
DB      453  GCATCGTACACCATGACCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 512
      |||||
QY      165  oCysG1yGlnSerPhePheG1yProThrLeuAsnSerPhe1leH1s1leLeuMetYrSe 185
      |||||
DB      513  AGAGAGTATGCGTACCTTTTCAAGTATCTCACTCTTGTGACACCTGCTGATGACCC 572
      |||||
QY      185  rTyTrrG1yLeuSer-----ValPheProSerMetH1s1sYrZrde 199
      |||||
DB      573  ATACTACTTCTTCTTCTCCCAAGGTTCCGGTTGCTGAAGCCATC-----618
      |||||
QY      199  uTrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrr 219
      |||||
DB      619  -----AAGCCGATACACCATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 671
      |||||
QY      219  sThrLeuSerAlaValLysProCysG1yPheProPheG1yCysLeu1lePheGlnSe 239
      |||||
DB      672  GTCCTTGTACAGCTACCTTCTTCCATGAGTACCATCCACAGCTCTTGTGAGCTTTGG 731
      |||||
QY      239  rSerYrMetMetThrLeuVal1leLeuPheLeuAsnPheYr1leGlnThrYrArg1y 259
      |||||
DB      732  AGTGTACATGATCACTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTTA 791
      |||||

```

QY 259 s1ySProValLysLeuGln 265  
 DB 792 AAGCCAAAAAAGAGCAG 810

RESULT 12  
 US-09-769-863-22  
 Sequence 22, Application US/09769863  
 Patent No. 663451  
 GENERAL INFORMATION:  
 APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Huang, Yung-Sheng  
 APPLICANT: Das, Tapas  
 APPLICANT: Thurmond, Jennifer  
 APPLICANT: Pereira, Surette L.  
 TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF  
 FILE REFERENCE: 6763.US.01  
 CURRENT APPLICATION NUMBER: US/09/769,863  
 CURRENT FILING DATE: 2001-01-25  
 NUMBER OF SEQ ID NOS: 32  
 SOFTWARE: FASTSEQ for Windows Version 4.0  
 SEQ ID NO 22  
 LENGTH: 957  
 TYPE: DNA  
 ORGANISM: *Moellerella alpina*  
 US-09-769-863-22

Alignment Scores:  
 Pred. No.: 2,326-37 Length: 957  
 Score: 397.00 Matches: 92  
 Percent Similarity: 51.04% Conservative: 55  
 Best Local Similarity: 31.94% Mismatches: 95  
 Query Match: 25.34% Indels: 47  
 DB: 4 Gaps: 7

US-09-624-670-63 (1-292) x US-09-769-863-22 (1-957)

```

QY      20  G1YPRoAaPSeRrAaG-----SerArgValArgG1YrPrrPheLeuLeuAspSerYr 35
      |||||
DB      80  GGGCGCGCCCTATGTCGATCTCTCGAGGCGCGCTGTGAGCC-CAGCCGAGAAAGTAC 138
      |||||
QY      36  LeuProThrPheLe-----40
      |||||
DB      139  ATCCCAAGATTTGTCATCACACGCGTGGTTCGTGCGGTGAGTCCCTTGGCC 198
      |||||
QY      41  -----LeuThr1leThrYrLeuLeu 47
      |||||
DB      199  CGTACGCTGCCGTGATGAACCGCTTCAAGTGTCTGATGCTGCTGCTGCTGCTGCTGCTG 258
      |||||
QY      48  Ser1leTrrPleuG1yAnLysYrMetLysAsnArgProAlaLeuSerLeuArgG1yLe 67
      |||||
DB      259  ACGTCTTGTGAGCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 318
      |||||
QY      68  LeuThrLeuYrAnLeuAla1leThrLeuLeuSerAla1YrMetLeuValGluLeuLe 87
      |||||
DB      319  TCGCTCTGACCAACTTCTTCTGCTGCTGATGAGCGCTTACATGTCGCGTGGATCCG 378
      |||||
QY      88  LeuSerSerTrpG1uG1yYrAsnLeuGlnCysGlnAsnLeuAspSerAlaG1yGln 107
      |||||
DB      379  TACAGAGCTTATCAGGCACTATGATGATGATGATGATGATGATGATGATGATGATGATG 438
      |||||
QY      108  G1yAspValArgValAlaLysValLeuTrpYrYrYrPrrPrrPrrPrrPrrPrrPrrPrr 127
      |||||
DB      439  GGT---CTTCTTATGCGCAAGATGATGCTGCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 495
      |||||
QY      128  LeuAspThr1lePhePheValLeuArgLysLysThrAsnGln1leThrPheLeuH1sVal 147
      |||||
DB      496  GTCACACATGATCATGCTGCTTCAAGAAACACCCGACATCTCTTCTTCTTCTTCTTCT 555
      |||||
QY      148  TyrH1sh1sa1seMetPheAsn1leTrrPrrPrrPrrPrrPrrPrrPrrPrrPrrPrr 167
      |||||
DB      556  TACACACAGCTTCATCTTCAACATCTGATGATGATGATGATGATGATGATGATGATGAT 615
      |||||

```



LENGTH: 818  
 TYPE: DNA  
 ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-71

## Alignment Scores:

Pred. No.: 2,1e-37 Length: 818  
 Score: 396.50 Matches: 90  
 Percent Similarity: 52.59% Conservative: 52  
 Best Local Similarity: 33.33% Mismatches: 101  
 Query Match: 25.30% Indels: 27  
 Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-71 (1-818)

```

QY 16 AspApmMcPhegIyProAgaPseArGValArgGlyTP----- 29
DB 21 GATGATGTGTGGCCCGCGGAGACCGAGTGGACCACTGATGATGATGCGCCAGCG 80
QY 30 PheLeuAepSerTyLeuProThrPheLeuThr-----1le 43
DB 81 TACGCACTCACCGATGGCTCCCGATGATGACGTCTCCATGCTGCGATTCGAGGTG 140
QY 44 ThrTyLeuAepSerIleTyLeuGlyAsnTyLeuValAsn---ArgProAlaLeu 62
DB 141 GGATACATGCGCATGCTGCTCTCGGATCCCGATCATGATGACATGAGAGGCTTTT 200
QY 63 SerLeuArgGlyIleLeuThrLeuTyAsnLeuAlaIleThrLeuSerIleTyMet 82
DB 201 GAGCTCAAGACCACTCAAGCTCTTGCAACAAGTTCTTGGACTTCTTGACATG 260
QY 83 LeuValGluLeuIleLeuSerSerTyLeuGlyGlyTyAsnLeuGlnCysGlnAsnLeu 102
DB 261 TGGGTGGAGACCATCCCGACGAGCTATCCCGAGGCTCAAAAGTTTGGAAACACATG 320
QY 103 AspSerIleGlyGlyAspValArg---ValAlaIleValLeuTrpTyTyPhe 121
DB 321 GAGAGAGGACCAAGCTCAAGCTCAAGCTCAAGCTCAAGCTCAAGCTCAAGCTG 380
QY 122 SerTyLeuValGluPheLeuAspThrIlePhePheValLeuArgIleTyThrAsnGln 141
DB 381 TCCAGGACATACAGATCTTGGATACCGCATATATATCTTGGACAGAGTTCAACAG 440
QY 142 IleThrPheLeuHisValTyHisHisAlaSerMetPheAsnIleTrpTyCysValLeu 161
DB 441 GTTCCCTTGTGCAAGTATGACCAACATGTCATGCTGGGCTGATCCGCC 500
QY 162 AsnTrpIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIle 181
DB 501 AAGTACGCTCCAGAGGTATGATGCTTTTCAATGATCCTCAACTCTTCGTGACACC 560
QY 182 LeuMetTySerTyTyGlyLeuSer-----ValPheProSerMet 195
DB 561 GTCATGTACGATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 617
QY 196 HisTySerTyLeuTrpTyLeuTyLeuThrGlnAlaGlnLeuValGlnPheValLeu 215
DB 618 -----AAGCGGTATCATCAACCATCTTCAAGTCAACCATCTTCAAGTCA 659
QY 216 ThrIleThrHisThrLeuSerAlaValIleProCysGlyPheProPheGlySerLeu 235
DB 660 ATGCTTGTGACATCTTGTGACATCTTGTGACATCTTGTGACATCTTGTGACATCT 719
QY 236 IlePheGlnSerSerTyTyMetMetThrLeuValIleLeuPheLeuAsnPheTyIleGln 255
DB 720 CAGCTTCTTGAGTGTATGATGATGATGATGATGATGATGATGATGATGATGATG 779
QY 256 ThrTyArgIleTyLeuProValIleTyLeu 265
DB 780 AGCTATCTTAAAGCCAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 809

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RESULT 15  
 US-09-903-456-69

```

; Sequence 69, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407/US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 69
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
; US-09-903-456-69

Alignment Scores:
Pred. No.: 3.62e-37 Length: 819
Score: 394.50 Matches: 90
Percent Similarity: 52.59% Conservative: 52
Best Local Similarity: 33.33% Mismatches: 101
Query Match: 25.18% Indels: 27
Gaps: 6

US-09-624-670-63 (1-292) x US-09-903-456-69 (1-819)
QY 16 AspApmMcPhegIyProAgaPseArGValArgGlyTP----- 29
DB 22 GATGATGTGTGGCCCGCGGAGACCGCGGAGACCGATGATGATGATGCGCCAGCG 81
QY 30 PheLeuAepSerTyLeuProThrPheLeuThr-----1le 43
DB 82 TACGCACTCACCGATGGCTCCCGATGATGACGTCTCCATGCTGCGATTCGAGGTG 141
QY 44 ThrTyLeuAepSerIleTyLeuGlyAsnTyLeuValAsn---ArgProAlaLeu 62
DB 142 GGATACATGCGCATGCTGCTCTTCCGATCCCGATCATGATGACATGAGAGAGGCTTT 201
QY 63 SerLeuArgGlyIleLeuThrLeuTyAsnLeuAlaIleThrLeuSerAlaTyMet 82
DB 202 GAGCTCAAGACCACTCAAGCTCTTGCAACAAGTTCTTCCGAGCTTCTCTGATG 261
QY 83 LeuValGluLeuIleLeuSerSerTyLeuGlyGlyTyAsnLeuGlnCysGlnAsnLeu 102
DB 262 TGGGTGGAGACCATCCCGACGAGCTATCCCGAGGCTCAAAAGTTTGGAAACACATG 321
QY 103 AspSerIleGlyGlyAspValArg---ValAlaIleValLeuTrpTyTyPhe 121
DB 322 GAGAGAGGACCAAGCTCATGCTCAAGGACATGCTCATGCTCATGCTCATGCTG 381
QY 122 SerTyLeuValGluPheLeuAspThrIlePhePheValLeuArgIleTyThrAsnGln 141
DB 382 TCCAGGACATACAGATCTTGGATACCGCATATATATCTTGGACAGAGTTCAACAG 441
QY 142 IleThrPheLeuHisValTyHisHisAlaSerMetPheAsnIleTrpTyCysValLeu 161
DB 442 GTTCCCTTGTGCAAGTATGACCAACATGTCATGCTGGGCTGATCCGCC 501
QY 162 AsnTrpIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHisIle 181
DB 502 AAGTACGCTCCAGAGGTATGATGCTTTTCAATGATCCTCAACTCTTCGTGACACC 561
QY 182 LeuMetTySerTyTyGlyLeuSer-----ValPheProSerMet 195

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Db      562  GTGATGTACGCACTACTCTCTCTCCCTCCCAAGGTTGGGTTGCGTGAAGCCATC--- 618
QY      196  HSLysTYrLeuTYrPlySLysTYrLeuThrglnAlaglnLeuValGlnPheValLeu 215
Db      619  -----AAGCGTACATCACCACTTCAGATGACCCAGTTCATGCA 660
QY      216  ThrIleThrHisThrLeuSerAlaValAllysProCysGlyPheProPheGlyCysLeu 235
Db      661  ATGCTTGTGACAGTCTCTGTACGACTACTCTCCCAATGCGACTACCAAGGCTCTGTG 720
QY      236  IlePheGlnSerSerTYrMetMetThrLeuValIleLeuPheLeuAsnPheTYrIleGln 255
Db      721  CAGCTTCTTGAGTGTACATGATCACTTGCTGCGCTCTCGGCACTTTTGTGTCAG 780
QY      256  ThrTYrArgLysLysProValLysGlu 265
Db      781  AGCTATCTTAAAAAGCCAAAAAGAGCAAG 810

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Search completed: April 1, 2004, 10:47:53  
 Job time : 82.0761 Secs



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; TYPE: DNA
; ORGANISM: Mus musculus
US-09-624-670-63 (1-292) x US-09-624-670-63 (1-879)

Alignment Scores:
Pred. No.: 6,02e-168 Length: 879
Score: 1567.00 Matches: 292
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
Gaps: 0

US-09-624-670-63 (1-292) x US-09-624-670-63 (1-879)
QY 1 MetGluGlnLeuValAlaPheAspAsnGluValAlaPheLeuAspAsnMetPheGly 20
DB 1 ATGGAGCAGCTGGAAGGCTTTGATTAATGAAGTCAATGCTTTTGACAAACATGTTTGA 60
QY 21 ProArgAspSerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIle 40
DB 61 CCAAGAGATTCTGAGTTCGGGGTGGTTCCTGCTGCACTTACCTTCCACCTTATC 120
QY 41 LeuThrIleThrTyrLeuLeuSerIleTyrPheGlyAsnLysTyrMetLysAsnArgPro 60
DB 121 CTCACCATCAGTACCTGCTCTGATATGCTGGTGAACATGATGATGAAGAGGCT 180
QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80
DB 181 GCTGTGCTCTCAGGGGCACTCCTCATGTTATACCTGCAATCACAACCTTCTTCG 240
QY 81 TyrMetLeuValGluLeuIleLeuSerSerTyrGlyGlyTyrAsnLeuGlnCysGln 100
DB 241 TATATGCTGTGGGCTCATCTCTCAGCTGGGAAGAGTTTACACTTGACGTGTCAG 300
QY 101 AsnLeuAspSerAlaGlyGluGlyAspValArgValAlaLysValLeuTyrTyrTyr 120
DB 301 AATTCGACAGTCAAGAGAGGTGATGCCGTGACCAAGCTTGTGTGATCACTAC 360
QY 121 PheSerLysLeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsn 140
DB 361 TTCTCCAACTAGAGGAGTTCCTGGACACGATTTCTTGTCTCGAATAAAGACCAT 420
QY 141 GlnIleThrPheLeuHisValTyrHisHisAlaSerMetPheAsnIleTyrTyrPheVal 160
DB 421 CAGATCACCCTTCTCTCATGCTATCACCAAGCTTCATGACCTGAGGTGTGTT 480
QY 161 LeuAsnTyrIleProCysGlyGlnSerPheGlyProThrLeuAsnSerPheIleHis 180
DB 481 TTGAACCTGATACCTTGTGCTCAAGCTTCTTGGACCAACCTGAAACGCTTATCAC 540
QY 181 IleLeuMetTyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTyr 200
DB 541 ATTCTCATGATCCTCTCTACGCGCTGCTGTGTTCCGTCATGACACAAAGTACCTTTGG 600
QY 201 TyrLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThr 220
DB 601 TCGAAGAAAGTACCTCAACAGGCTCAGCTGCTGCAAGTCTGCTACCACTACGACACG 660
QY 221 LeuSerAlaValAlaLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer 240
DB 661 CTGAGTCCCGGTGGAGGCCCTGAGCTTCCCTTGGCTGTCTCATCTTCCAGCTTCC 720
QY 241 TyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrTyrArgLys 260
DB 721 TATATGATGAGCGGTGATCATCTGTCTTAACTTCTATATTCAGACATACGGGAAGAAG 780
QY 261 ProValLysLysGluLeuGlnGluLysGluValLysAsnGlyPheProLysAlaHisLeu 280
DB 781 CCAATGAAAGAAAGCTGCAAGAGAAAGATGTAAGATGTTTCCCAAAACCCACTTA 840
QY 281 IleValAlaAsnGlyMetThrAspLysLysAlaGln 292
DB 841 ATTGTGCTAATGTCATGACGACGACAAAGAGCTTCAA 876

```

```

RESULT 2
US-09-649-199A-22
; Sequence 22, Application US/09649199A
; Publication No. US20030082754A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Thumond, Jennifer M.
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
; FILE REFERENCE: 6804.US.01
; CURRENT APPLICATION NUMBER: US/09/849,199A
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 879
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-649-199A-22

Alignment Scores:
Pred. No.: 6,02e-168 Length: 879
Score: 1567.00 Matches: 292
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 100.00% Indels: 0
Gaps: 0

US-09-624-670-63 (1-292) x US-09-649-199A-22 (1-879)
QY 1 MetGluGlnLeuValAlaPheAspAsnGluValAlaPheLeuAspAsnMetPheGly 20
DB 1 ATGGAGCAGCTGGAAGGCTTTGATTAATGAAGTCAATGCTTTTGACAAACATGTTTGA 60
QY 21 ProArgAspSerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIle 40
DB 61 CCAAGAGATTCTGAGTTCGGGGTGGTTCCTGCTGCACTTACCTTCCACCTTATC 120
QY 41 LeuThrIleThrTyrLeuLeuSerIleTyrPheGlyAsnLysTyrMetLysAsnArgPro 60
DB 121 CTCACCATCAGTACCTGCTCTGATATGCTGGTGAACATGATGATGAAGAGGCT 180
QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80
DB 181 GCTGTGCTCTCAGGGGCACTCCTCATGTTATACCTGCAATCACAACCTTCTTCG 240
QY 81 TyrMetLeuValGluLeuIleLeuSerSerTyrGlyGlyTyrAsnLeuGlnCysGln 100
DB 241 TATATGCTGTGGGCTCATCTCTCAGCTGGGAAGAGTTTACACTTGACGTGTCAG 300
QY 101 AsnLeuAspSerAlaGlyGluGlyAspValArgValAlaLysValLeuTyrTyrTyr 120
DB 301 AATTCGACAGTCAAGAGAGGTGATGCCGTGACCAAGCTTGTGTGATCACTAC 360
QY 121 PheSerLysLeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsn 140
DB 361 TTCTCCAACTAGAGGAGTTCCTGGACACGATTTCTTGTCTCGAATAAAGACCAT 420
QY 141 GlnIleThrPheLeuHisValTyrHisHisAlaSerMetPheAsnIleTyrTyrCysVal 160
DB 421 CAGATCACCCTTCTCTCATGCTATCACCAAGCTTCTTGGACCAACCTGAAACGCTTATCAC 480
QY 161 LeuAsnTyrIleProCysGlyGlnSerPheGlyProThrLeuAsnSerPheIleHis 180
DB 481 TTGAACCTGATACCTTGTGCTCAAGCTTCTTGGACCAACCTGAAACGCTTATCAC 540
QY 181 IleLeuMetTyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTyr 200
DB 541 ATTCTCATGATCCTCTCTACGCGCTGCTGTGTTCCGTCATGACACAAAGTACCTTTGG 600

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QY 201 TrrLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrTleThrHisThr 220  
 Db 601 TGAAGAAGTACTCACAAGAGCTCAGCTGGTGCAGTTCGTAATCACCATCACCACACAG 660  
 QY 221 LeuSerAlaValValLysProCysGlyPhePheProPheGlyCysLeuIlePheGlnSerSer 240  
 Db 661 CTAGAGCGCGGTGAGAGCCCTGTGGCTTCCCTGGCTTCCCTGCTCATCTCCAGTCTTCC 720  
 QY 241 TyrMetLeuThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLys 260  
 Db 721 TATATGATGACGCTGGTCTCATCTGTTCTTAACCTTCTATATCAGACATACCGAAGAAAG 780  
 QY 261 ProValLysLysGlnLeuGlnGlnLysGlnValLysAsnGlyPheProLysAlaHisLeu 280  
 Db 781 CCACTAAGAAAGAGCTGCAGAGAAAGAAAGAAAGTGTTCCTCCCAAGCCCACTTA 840  
 QY 281 IleValAlaAsnGlyMetThrAspLysLysAlaGln 292  
 Db 841 ATTGTGCTATATGCGATGACGAGCAAGAAAGCTCA 876

RESULT 3  
 US-10-120-637A-22  
 ; Sequence 22, Application US/10120637A  
 ; Publication No. US20030134400A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Thumond, Jennifer M.  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Das, Tapas  
 ; APPLICANT: Leonard, Amanda E.  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES  
 ; FILE OF INVENTION: THEREOF  
 ; FILE REFERENCE: 6804.US.P1  
 ; CURRENT APPLICATION NUMBER: US/10/120,637A  
 ; CURRENT FILING DATE: 2002-04-11  
 ; PRIOR APPLICATION NUMBER: US 09/849,199  
 ; PRIOR FILING DATE: 2001-05-04  
 ; NUMBER OF SEQ ID NOS: 73  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 22  
 ; LENGTH: 879  
 ; TYPE: DNA  
 ; ORGANISM: Mus musculus  
 US-10-120-637A-22

Alignment Scores:  
 Pred. No.: 6,02e-168 Length: 879  
 Score: 1567.00 Matches: 292  
 Percent Similarity: 100.00% Conservative: 0  
 Best Local Similarity: 100.00% Mismatches: 0  
 Query Match: 100.00% Indels: 0  
 DB: 14 Gaps: 0

US-09-624-670-63 (1-292) x US-10-120-637A-22 (1-879)

QY 1 MetGlnGlnLeuLysAlaPheAspAsnGlnValAlaAsnAlaPheLeuAspAsnMetPheGly 20  
 Db 1 ATGAGGAGCTGAGAGGCTTTGATATGATGATGATGATGATGATGATGATGATGATGATGATG 60  
 QY 21 ProArgAspSerArgValArgGlyTyrPheLeuLeuAspSerTyrLeuProThrPheIle 40  
 Db 61 CCACGAGATCTCGAGTTCGCGGGGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 120  
 QY 41 LeuThrIleThrTyrLeuLeuSerIleTrrLysGlnAlaAsnLysTyrMetLysAsnArgPro 60  
 Db 121 CTCACCATCAGTACCTGCTCTCGATATGCTGAGTGAACAGTACATGAGAAACAGGCTT 180  
 QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80  
 Db 181 GCTGTGTCTCAGAGGAGATCTCAGTCTGATATACCTGCAATCAGATCATTCTTCTGCG 240

QY 81 TyrMetLeuValGlnLeuIleLeuSerSerTrrGlnGlyTyrAsnLeuGlnCysGln 100  
 Db 241 TATATGCTGGTGAAGCTATCTCTCCAGCTGAGAGAGGTTATCAACTTGCACTGCTCAG 300  
 QY 101 AsnLeuAspSerArgLysGlnGlyAspValArgValAlaLysValLeuTrrTrrTyrTyr 120  
 Db 301 AATCTCGACAGTGCAGAGAGAGTGTGTCCGGGTAGCAAGGCTTGTGTGTGCTATAC 360  
 QY 121 PheSerLysLeuValGlnPheLeuAspThrIlePhePheValLeuAlaGlyLysThrAsn 140  
 Db 361 TTCTCCAAACTGAGTGAAGTCTCTGACACGATTTCTTGTTCACAAAAAACAACAAAT 420  
 QY 141 GlnIleThrPheLeuHisValTyrHisHisAlaSerMetPheAsnIleTrrTrrCysVal 160  
 Db 421 CAGATACCTTCTCTTCACTGCTATACACACCGCTGCATGTTCAACATCTGCTGTGTT 480  
 QY 161 LeuAsnTrrIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHis 180  
 Db 481 TTGAAGTGAATACCTTGCTGCTCAAGCTTCTTGGACCACTGAAACAGCTTATATCCAC 540  
 QY 181 IleLeuMetTyrSerTyrTrrGlyLeuSerValPheProSerMetHisLysTyrLeuTrr 200  
 Db 541 ATTCTCAGTACTCTCTACTACAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600  
 QY 201 TrrLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThr 220  
 Db 601 TGAAGAAGTACTCACAAGAGCTCAGCTGGTGCAGTTCGTAATCACCATCACCACACAG 660  
 QY 221 LeuSerAlaValValLysProCysGlyPhePheProPheGlyCysLeuIlePheGlnSerSer 240  
 Db 661 CTAGAGCGCGGTGAGAGCCCTGTGGCTTCCCTGGCTTCCCTGCTCATCTCCAGTCTTCC 720  
 QY 241 TyrMetLeuThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLys 260  
 Db 721 TATATGATGACGCTGGTCTCATCTGTTCTTAACCTTCTATATCAGACATACCGAAGAAAG 780  
 QY 261 ProValLysLysGlnLeuGlnGlnLysGlnValLysAsnGlyPheProLysAlaHisLeu 280  
 Db 781 CCACTAAGAAAGAGCTGCAGAGAAAGAAAGAAAGTGTTCCTCCCAAGCCCACTTA 840  
 QY 281 IleValAlaAsnGlyMetThrAspLysLysAlaGln 292  
 Db 841 ATTGTGCTATATGCGATGACGAGCAAGAAAGCTCA 876

RESULT 4  
 US-10-156-911-5  
 ; Sequence 5, Application US/10156911  
 ; Publication No. US20030163845A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407.US.P4  
 ; CURRENT APPLICATION NUMBER: US/10/156,911  
 ; CURRENT FILING DATE: 2002-10-01  
 ; PRIOR APPLICATION NUMBER: US 09/903,456  
 ; PRIOR FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 122  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 5  
 ; LENGTH: 879  
 ; TYPE: DNA  
 ; ORGANISM: Mus musculus



QY 181 IleuMetTyrSerTyrTyrGlyLeuSerValPheProSerMetHisTyrLeuTrp 200  
 Db 625 ATTCTTATGATGACTCTCTACTATGAGCTTCTGTGTTCCTATGACAAAGTATCTTTGG 684  
 QY 201 Trp-Tyr-Tyr-Leu-Thr-Gln-Ala-Gln-Leu-Val-Gln-Phe-Val-Leu-Thr-Ile-Thr-His-Trp 220  
 Db 685 TGGAGAAATATCTCAACAGGCTCAGCTGTGTGCAAGTGTGTCTCCATCCAGCACACC 744  
 QY 221 LeuSerAlaValValValProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer 240  
 Db 745 ATGAGCCCGCTGCGAAACCGTGTGGCTTCCCTTCGCTTCATCTTCCAGTCACTCT 804  
 QY 241 TyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLys 260  
 Db 805 TATATGCTAACGTTAGTCAATCTCTCTTTTAAATTTTATGTTCAGACATACCGAAAAAG 864  
 QY 261 ProValLysLysGluLeuGlnGly-----LysGluValLysAsnGlyPhePro 276  
 Db 865 CCAATGAAGAAAGATATGCAAGAGCCACTGCAGGGAAAGATGAAGATGGTTTTC 924  
 QY 277 LysAlaHisLeuIleValAlaAsnGlyMetThrAspLysLysAlaGln 292  
 Db 925 AAAGCCTACTTCACTGCGCAAAATGAGTGAATGACAAAGAACCAA 972

## RESULT 6

US-10-058-270A-91  
 ; Sequence 91, Application US/10058270A  
 ; Publication No. US20040029114A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Mack, David H.  
 ; APPLICANT: Gish, Kurt C.  
 ; APPLICANT: Afari, Daniel  
 ; APPLICANT: Eos Biotechnology, Inc.  
 ; TITLE OF INVENTION: Methods of Diagnosis of Breast Cancer, Compositions and  
 ; FILE OF INVENTION: Methods of Screening for Modulators of Breast Cancer  
 ; FILE REFERENCE: 018501-005210US  
 ; CURRENT APPLICATION NUMBER: US/10/058, 270A  
 ; CURRENT FILING DATE: 2002-01-24  
 ; PRIOR APPLICATION NUMBER: US 60/263,965  
 ; PRIOR FILING DATE: 2001-01-24  
 ; PRIOR APPLICATION NUMBER: US 60/265,928  
 ; PRIOR FILING DATE: 2001-02-02  
 ; PRIOR APPLICATION NUMBER: US 09/829,472  
 ; PRIOR FILING DATE: 2001-04-09  
 ; PRIOR APPLICATION NUMBER: US 60/282,698  
 ; PRIOR FILING DATE: 2001-04-09  
 ; PRIOR APPLICATION NUMBER: US 60/288,590  
 ; PRIOR FILING DATE: 2001-05-04  
 ; PRIOR APPLICATION NUMBER: US 60/294,443  
 ; PRIOR FILING DATE: 2001-05-29  
 ; NUMBER OF SEQ ID NOS: 141  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 91  
 ; LENGTH: 2340  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; US-10-058-270A-91

## Alignment Scores:

Pred. No.: 9,98e-152 Length: 2340  
 Score: 1430.00 Matches: 261  
 Percent Similarity: 93.92% Conservative: 17  
 Best Local Similarity: 88.18% Mismatches: 14  
 Query Match: 91.26% Indels: 4  
 DB: 12 Gaps: 1

US-09-624-670-63 (1-292) x US-10-058-270A-91 (1-2340)

QY 1 MetGluGlnLeuValAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGly 20  
 Db 85 ATGGAACATCTAAAGGCTTGTGATGATGAATCAATCTTTTGTGACATATATGTGGA 144

QY 21 ProArgAspSerArgValArgGlyTrpPheLeuLeuAspSerTyrLeuProThrPheIle 40  
 Db 145 CCGCGAATTTCTGAGTCAAGAGGTGTTCAAGTTGAGCTCTTACTCTTCCATCTTTT 204  
 QY 41 LeuThrIleThrTyrLeuLeuSerIleTrpLeuGlyAsnLysTyrMetLysAsnArgPro 60  
 Db 205 CTTACTGTCAATGATCTGCTCTCAATATGCTGGGTAACAGTATATGAAGAACAGACT 264  
 QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80  
 Db 265 GCTCTTCTCTCAGGGGATTCCTACCTTGTTAACTTTGGAATACACTTCTCTCCGG 324  
 QY 81 TyrMetLeuValGluLeuIleLeuSerSerTrpGluGlyTyrAsnLeuGlnCysGln 100  
 Db 325 TACATGTGCGACAGCTCATCTCTCCACTTGTGGAAGAGGCTACAACTTACAGTGC 384  
 QY 101 AsnLeuAspSerAlaGlyGluGlyAspValAlaValAlaValLeuTrpTrpTyrTrp 120  
 Db 385 GATCTTACACGCGCAGGAGGAGAGCTGACATCCGGATAGCCAAAGTCTTGTGTGATCAT 444  
 QY 121 PheSerLysLeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsn 140  
 Db 445 TTCTCCAAATCAGTAAAGTTCTTGGACACAAATTTCTTGTGGGAAAAAAGAGT 504  
 QY 141 GlnIleThrPheLeuHisValTyrHisAlaSerMetPheAsnIleTrpTrpCysVal 160  
 Db 505 CAGATTACTTTCTTCATGATATCATCATGCTTCTATGTTTACATCGTGGTGTGTC 564  
 QY 161 LeuAsnTrpIleProCysGlyGlnSerPhePheGlyProThrLeuAsnSerPheIleHis 180  
 Db 565 TTGAACCTGATACCTTGTGACAAAGTTCTTTTGAACCAACCTGAACAGTTTGTGCAC 624  
 QY 181 IleuMetTyrSerTyrTyrGlyLeuSerValPheProSerMetHisTyrLeuTrp 200  
 Db 625 ATTCTTATGATGACTCTCTACTATGAGCTTCTGTGTTCCTATGACAAAGTATCTTTGG 684  
 QY 201 TrpLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisTrp 220  
 Db 685 TGGAGAAATATCTCAACAGGCTCAGCTGTGTGCAAGTGTGTCTCACATCCAGCACACC 744  
 QY 221 LeuSerAlaValValValProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer 240  
 Db 745 ATGAGCCCGCTGCGAAACCGTGTGGCTTCCCTTCGCTTCATCTTCCAGTCACTCT 804  
 QY 241 TyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLysLys 260  
 Db 805 TATATGCTAACGTTAGTCAATCTCTCTTTTAAATTTTATGTTCAGACATACCGAAAAAG 864  
 QY 261 ProValLysLysGluLeuGlnGly-----LysGluValLysAsnGlyPhePro 276  
 Db 865 CCAATGAAGAAAGATATGCAAGAGCCACTGCAGGGAAAGATGAAGATGGTTTTC 924  
 QY 277 LysAlaHisLeuIleValAlaAsnGlyMetThrAspLysLysAlaGln 292  
 Db 925 AAAGCCTACTTCACTGCGCAAAATGAGTGAATGACAAAGAACCAA 972

## RESULT 7

US-10-342-887-1707  
 ; Sequence 1707, Application US/10342887  
 ; Publication No. US20040058340A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Dai, Hongyue  
 ; APPLICANT: He, Yidong  
 ; APPLICANT: Linsley, Peter S.  
 ; APPLICANT: Mao, Mao  
 ; APPLICANT: Roberts, Christopher J.  
 ; APPLICANT: Van 't Veer, Laura Johanna  
 ; APPLICANT: Van de Vijver, Marc J.  
 ; APPLICANT: Bernards, Rene  
 ; TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients  
 ; FILE REFERENCE: 9201-188-998  
 ; CURRENT APPLICATION NUMBER: US/10/342, 887  
 ; CURRENT FILING DATE: 2003-01-15

PRIOR APPLICATION NUMBER: 60/298,918  
 PRIOR FILING DATE: 2001-06-18  
 PRIOR APPLICATION NUMBER: 60/380,710  
 PRIOR FILING DATE: 2002-05-14  
 PRIOR APPLICATION NUMBER: 10/772,118  
 PRIOR FILING DATE: 2002-06-14  
 NUMBER OF SEQ ID NOS: 2699  
 SEQ ID NO 1707  
 LENGTH: 2340  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-10-342-887-1707

## Alignment Scores:

Pred. No.:	9,98e-152	Length:	2340
Score:	1430.00	Matches:	261
Percent Similarity:	93.92%	Conservative:	17
Best Local Similarity:	88.18%	Mismatches:	14
Query Match:	91.26%	Indels:	4
DB:	12	Gaps:	1

US-09-624-670-63 (1-292) x US-10-342-887-1707 (1-2340)

QY 1 MetGluGlnLeuLysAlaPheAspGluValAsnAlaPheLeuAspAsnMetPheGly 20  
 DB 85 ATGGAACATCTAAAGGCTTGTATGATGAACAATGCTTTTGGACAAATATGTTTGA 144  
 QY 21 ProArgAspSerArgValArgGlyTrpPheLeuAspSerTyrLeuProThrPheIle 40  
 DB 145 CCGCGAGATTCCTGATCAGAGGGTGGTTCAGGTTGAGCTCTTACCTCCACTTTT 204  
 QY 41 LeuThrIleThrTyrLeuLeuSerIleTrpLeuGlyAsnLysTyrMetLysAsnArgPro 60  
 DB 205 CTTACTGCTGATGATGCTCTCAATATGCTGGGTAACAATATATAGAACAGACT 264  
 QY 61 AlaLeuSerLeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAla 80  
 DB 265 GCTCTTCTCTCTCGGGGATTCCTCACCCTTGTAATCTTGGAATCACCTCTCTCGCG 324  
 QY 81 TyrMetLeuValGluLeuIleLeuSerSerTrpGluGlyTyrAsnLeuGlnCysGln 100  
 DB 325 TACATGCTGGCAGAGCTCATTTCTCTCCACTGGGAAGAGGCTCAACTTACAGGTCAA 384  
 QY 101 AsnLeuAspSerIleArgGluGlyAspValArgValAlaLysValLeuTrpTrpTyr 120  
 DB 385 GACTTACCAAGCGGAGGAGAGCTGACATCCGAGTCCGAAAGTCTTGTGGTACTAT 444  
 QY 121 PheSerLysLeuValGluPheLeuAspTrpIlePhePheValLeuArgLysLeuThrAsn 140  
 DB 445 TTCTCCAAATCAGTACAGTTCCCGACACAAATTTCTTGTGGGAAAAAAGAGT 504  
 QY 141 GluIleThrPheLeuHisValTyrHisHisAlaSerMetPheAsnIleTrpTrpCysVal 160  
 DB 505 CAGATTACTTTCTTCATGATATCATCATGCTTCAATGTTTAAATCTGTGGTGGTCT 564  
 QY 161 LeuAsnTrpIleProCysGluGlnSerPhePheGlyProThrLeuAsnSerPheIleHis 180  
 DB 565 TTGAATGATACCTTCTGACAAAGTTCTTTGACCAACACTAACAGTTTGTCTCAC 624  
 QY 181 IleLeuMetLysSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrLeuTrp 200  
 DB 625 ATTCTTATGTAATCTCACTATGATGACTTGTGTGTTCCATCTATACACAAAGATCTT 684  
 QY 201 TrpLysLysTyrLeuThrGlnAlaGlnLeuValGlnPheValLeuThrIleThrHisThr 220  
 DB 685 TGGAGAAATATCTCACACAGCTCAGCTGGTGCATTTGTCTTCAATCACACGACACC 744  
 QY 221 LeuSerAlaValAlaLysProCysGlyPheProPheGlyCysLeuIlePheGlnSerSer 240  
 DB 745 ATGAGCGCGCTCGTGAACCGTGTGGCTTCCCTTGCTGTCTCATCTTCCAGTCACT 804  
 QY 241 TyrMetMetThrLeuValIleLeuPheLeuAsnPheTyrIleGlnThrTyrArgLys 260

DB 805 TATATGTAAGCTTAGTACCTCTCTTAATTTTATGTTAGACATACGAAAAAG 864  
 QY 261 ProValLysLysGluLeuGlnGlu-----LysGluValLysAsnGlyPhePro 276  
 DB 865 CCAATGAAAGAAAGATATCCAAAGACCACTCGAGGAAAGAGTGAAGATGTTTTC 924  
 QY 277 LysAlaHisLeuIleValAlaAsnGlyMetThrAspLysLysAlaGln 292  
 DB 925 AAGCCTACTCTCAGTACGACAAATGAGATGATGAACAAGAACACAA 972

## RESULT 8

US-09-624-456-6  
 Sequence 6, Application US/09903456  
 Patent No. US2002013874A1  
 GENERAL INFORMATION:  
 APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Leonard, Amanda Eun-Yeong  
 APPLICANT: Huang, Yung-Sheng  
 APPLICANT: Pereira, Suzette L.  
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 FILE REFERENCE: 6407 US.P3  
 CURRENT APPLICATION NUMBER: US/09/903,456  
 PRIOR FILING DATE: 2001-07-11  
 PRIOR APPLICATION NUMBER: US 09/624,670  
 PRIOR FILING DATE: 2000-07-24  
 PRIOR APPLICATION NUMBER: US 09/379,095  
 PRIOR FILING DATE: 1999-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 116  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO 6  
 LENGTH: 900  
 TYPE: DNA  
 ORGANISM: Mus musculus  
 US-09-903-456-6

## Alignment Scores:

Pred. No.:	1.35e-98	Length:	900
Score:	956.50 <td>Matches:</td> <td>168 </td>	Matches:	168
Percent Similarity:	71.58% <td>Conservative:</td> <td>36 </td>	Conservative:	36
Best Local Similarity:	58.95% <td>Mismatches:</td> <td>78 </td>	Mismatches:	78
Query Match:	61.04% <td>Indels:</td> <td>3 </td>	Indels:	3
DB:	9 <td>Gaps:</td> <td>1 </td>	Gaps:	1

US-09-624-670-63 (1-292) x US-09-903-456-6 (1-900)

QY 4 LeuLysAlaPheAspAsnGluValAsnAlaPheLeuAspAsnMetPheGlyProArgAsp 23  
 DB 1 ATGGAACATTTTGAATGCTCACTCACTCAATTTCAAGGCTTCTCGGCCCCGAGAT 60  
 QY 24 SerArgValArgGlyTrpPheLeuLeuAspSerTyrLeuProThrPheIleLeuThrIle 43  
 DB 61 ACAAGAGTCAAGAGATGTTCTCTCGACAAATTAATCCCTAGTTGTGTTCTGTT 120  
 QY 44 ThrTyrLeuLeuSerIleTrpLeuGlyAsnLysTyrMetLysAsnArgProAlaLeuSer 63  
 DB 121 ATTACTTACTATGATGATGCTGACCAAAATACATGAAGAACCGGACCGTCTCT 180  
 QY 64 LeuArgGlyIleLeuThrLeuTyrAsnLeuAlaIleThrLeuLeuSerAlaTyrMetLeu 83  
 DB 181 TCCCGAGGATCTCAGATTGATATACCTTGAAGTCAACCCGCTGTCTCTACATGTT 240  
 QY 84 ValGluLeuIleLeuSerSerTrpGluGlyTyrAsnLeuGlnCysGlnAsnLeuAsp 103  
 DB 241 TATGATGTTGTACACAGGTGTGTGGAGGCAAAATCAACTTTTCTGCCAGGAAACGC 300  
 QY 104 SerAlaGlyGluGlyAspValArgValAlaLysValLeuTrpTrpTyrPheSerLys 123  
 DB 301 AGCGGGGAGATCCGATATGAAAGATCATCCGCTCTGCTGTGTACTTCTCCAAA 360  
 QY 124 LeuValGluPheLeuAspThrIlePhePheValLeuArgLysLysThrAsnGlnIleThr 143

[illegible]



[illegible]

```

Db      361 CTCATGAAATTATGGAACACTTCTTCTTCTGCGCAAGAACCAACCCGATCAG 420
QY      144 PheLeuH1sValTYRH1SH1a1aSerMetPheAsn1leTPTPCySValLeuAsnTP 163
Db      421 GTCCTGACAGCTTACCAACATGCGTCGATGCTGAACATCGGTGTGTGATGAACCTGG 480
QY      164 TLeProCySGlyGlnSerPhePheGlyProThrLeuAsnSerPhe1leH1s1leLeuMet 183
Db      481 GTCCTGCGGCGGCACTTATTTGGTGCCACACTTAATAGCTTCAACCGCTTCATG 540
QY      184 TYSerTYR1YGL1LeuSerValPheProSerMetH1s1YsTYRLeuTPTP1Ys1Ys 203
Db      541 TACTCTTACTATGTTTGTCTGTCAGTCCCTTCAGTCCGTCACATACCTCTGTGTGAAG 600
QY      204 TYRLeuThrglnAlaGlnLeuValGlnPheValLeuThrl1eThrH1s1ThrLeuSerAla 223
Db      601 TACATCACTCAGGGGCGGCACTGCTTCAAGTTTGTGTGACATCAATCCAGACAGCCTGGG 660
QY      224 ValVal1YsProCySGlyPheProPheGlyCysLeu1lePheGlnSerSerTYRMetMet 243
Db      661 GTCATCTGCGCCTGCAACATTCCTCTTGTTGTGTGATTTCCAGATGGATACATTATT 720
QY      244 ThrlLeuVal1leLeuPheLeuAsnPhetYR1leGlnThrTYRArg1Ys1YsProVal1Ys 263
Db      721 TCCCTGATTGCTCTCTTCAAACTTCTACATTCAGACTACAAACAAGAAAGGCGCTCC 780
QY      264 LysGluLeuGlnGluLysGluVal1YsAsnGlyPheProLysAlaH1s1leLeuVal 282
Db      781 CGAAGAAAGAACCACTGAGAGACCAACCAAGATGG-----TCCGTGGCTGCT 828
QY      283 AlaAsnGlyMetThrasp 288
Db      829 GTGAATGGACACACCAAC 846

RESULT 12
US-10-156-911-3
/ Sequence 3, Application US/10156911
/ Publication No. US20030163845A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Leonard, Amanda Eun-Yeong
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407 US P4
/ CURRENT APPLICATION NUMBER: US/10/156,911
/ PRIOR FILING DATE: 2002-10-01
/ PRIOR APPLICATION NUMBER: US 09/903,456
/ PRIOR FILING DATE: 2001-07-11
/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24
/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1998-08-23
/ PRIOR APPLICATION NUMBER: US 09/145,828
/ PRIOR FILING DATE: 1998-09-02
/ NUMBER OF SEQ ID NOS: 122
/ SOFTWARE: FaastSeq for Windows Version 4.0
/ SEQ ID NO 3
/ LENGTH: 914
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-10-156-911-3

```

## Alignment Scores:

```

Pred. No.: 6,96e-57 Length: 914
Score: 941.50 Matches: 165
Percent Similarity: 72.73% Conservative: 43
Best Local Similarity: 57.69% Mismatches: 73
Query Match: 60.08% Indels: 5
DB: 14 Gaps: 2

```

US-09-624-670-63 (1-292) x US-10-156-911-3 (1-914)

```

QY      4 Leu1YsAlaPheAsnGlnValAsnAlaPheLeuAsnMetPheGlyProArgAsp 23
Db      1 ATGGAACATTTTGTATGATCATCATTAAGCTATTTCAAGCACTGTCAGCTCAGAT 60
QY      24 SerArgValArgGlyTPPheLeuLeuAsnSerTYRLeuProThrPhe1leThrlle 43
Db      61 ACTAGAGTAAAGATGTTTCTTCTGACATTAATTAACCATTTATTCCTGCTGTC 120
QY      44 ThrlTYRLeuSer1leTPLeuGlyAsn1YsTYRMet1YsAsnArgProAlaLeuSer 63
Db      121 ATATATTACTAATTGATGCTGGGACCAAAATACATGAGATAAACAGCATTCCT 180
QY      64 LeuArgGly1leLeuThrlLeuTYRAsnLeuAla1leThrlLeuSerAlaTYRMetLeu 83
Db      181 TCCCGGGGATTTAGTGAGTAACTGATACCTGACCTGCTGCTCTGTAATGTTTC 240
QY      84 ValGluLeu1leLeuSerSerTPTPGlyGlyTYRAsnLeuGlnCysGlnAsnLeuAsp 103
Db      241 TGTGATTAAGAACAGAGATAGGAAAGCAAAATACAACTTCTGTGCGGACACAGC 300
QY      104 Ser1Arg1YsGlyAspValArgValAla1YsValLeuThrlTPTPTYRPheser1Ys 123
Db      301 ACCGACAGAGATCAGATATGAAATATCCGTGCTCTGAGTACTACTTCTCCAAA 360
QY      124 LeuValGlnPheLeuAsnPhrl1lePhePheValLeuArg1Ys1YsThrasnGln1leThr 143
Db      361 CTCATGAAATTATGACACACTTCTTCTTATCTGCGCAAGAAACAACCAAGCATCAG 420
QY      144 PheLeuH1sValTYRH1SH1a1aSerMetPheAsn1leTPTPCySValLeuAsnTP 163
Db      421 GTCCTGACAGCTTACCAACATGCTCCATCTGACATCTGAGTGGTGTGAGAACTGG 480
QY      164 TLeProCySGlyGlnSerPhePheGlyProThrLeuAsnSerPhe1leH1s1leLeuMet 183
Db      481 GTCCTGCGGCGCCTTATTTGTGTCACACTTAATAGCTTCAACCGCTTCATG 540
QY      184 TYSerTYR1YGL1LeuSerValPheProSerMetH1s1YsTYRLeuTPTP1Ys1Ys 203
Db      541 TACTCTTACTATGTTTGTCTGTCAGTCCCTTCAGTCCGTCACATACCTCTGTGTGAAG 600
QY      204 TYRLeuThrglnAlaGlnLeuValGlnPheValLeuThrl1eThrH1s1ThrLeuSerAla 223
Db      601 TACATCACTCAGGGGCGGCTGCTTCAAGTTTGTGTGACATCAATCCAGACAGCCTGGG 660
QY      224 ValVal1YsProCySGlyPheProPheGlyCysLeu1lePheGlnSerSerTYRMetMet 243
Db      661 GTCATCTGCGCCTGCAACATTCCTCTTGTTGTGTGATTTCCAGATGGATACATTATT 720
QY      244 ThrlLeuVal1leLeuPheLeuAsnPhetYR1leGlnThrTYRArg1Ys1YsProVal1Ys 263
Db      721 TCCCTGATTGCTCTCTTCAAACTTCTACATTCAGACTACAAACAAGAAAGGCGCTCC 780
QY      264 LysGluLeuGlnGluLysGluVal1YsAsnGlyPheProLysAlaH1s1leLeuVal 282
Db      781 CGAAGAAAGAACCACTGAGAGACCAACCAAGATGG-----TCCGTGGCTGCT 828
QY      283 AlaAsnGlyMetThrasp 288
Db      829 GTGAATGGACACACCAAC 846

RESULT 13
US-10-054-534B-21
/ Sequence 21, Application US/10054534B
/ Publication No. US20030167525A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Das, Tapas
/ APPLICANT: Thurmond, Jennifer M.
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

```



```

Db 361 CTGATGAAATTTATGAGCACTTTCTTTCATCTCCGAGAAACACCAACAGTCCG 420
Qy 144 PheleuHsValIyThiShiSaIaSerMetPheAsnIleTyrTrpCyValIeuAsnTrp 163
Db 421 GTCTTGACCTTACCCACCATGCTGCATGCTGAACATCTGGTGTGTGATGAACCTGG 480
Qy 164 IleProCyGlyGlnSerPhePheGlyProThrIleuAsnSerPheIleShiSleuMet 183
Db 481 GTCCCTGCGGCGCCTCTTTATTTGGTCCACCTTAATAGCTTCACTCCACGCTCCATG 540
Qy 184 TyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrIleuTrpTrpLys 203
Db 541 TACTCTACTAGTGGTTGTGTGTCAGTCCCTTCATCGCTGCACCTGCTGGAGAAAG 600
Qy 204 TyrIleuThiGlnAlaGlnLeuValGlnPheValIeuThiIleThiShiThiLeuSerIa 223
Db 601 TACATCACTAGGAGGCGAGCTGTCACTGTGTGCTGACATCATCCAGACCAAGCTGCGG 660
Qy 224 ValValIyProCyGlyPheProPheGlyCySleuIlePheGlnSerSerTyrMetMet 243
Db 661 GTCATCTGCGCGTGCACATTCCTCTTGGTGTGTATTCAGATTGGATACATTATT 720
Qy 244 ThrIleuValIleuPheLeuAsnPheTyrIleGlnThrTyrArgLysLysProValIys 263
Db 721 TCCCTGATGCTCTCTTCAACAACCTTCACTTCAAGACTCAACAAGAGAGGCGCTCC 780
Qy 264 LysGluLeuGlnGlu---LysGluValIySaengIyPheProLysAlaHisIleuIleVal 282
Db 781 CGAAGGAAGAACCACTGAAAGGACCAACCAAGATGG-----TCCGTGGCTGCT 828
Qy 283 AlaAsnGlyMetThrAsp 288
Db 829 GTGATGACACACCAAC 846

```

## RESULT 15

```

US-10-431-952-21
: Sequence 21, Application US/10431952
: Publication No. US2003019073A1
: GENERAL INFORMATION:
: APPLICANT: Abbott Laboratories
: APPLICANT: Mukerji, Pradip
: APPLICANT: Huang, Yung-Sheng
: APPLICANT: Das, Tapas
: APPLICANT: Thurmond, Jennifer
: APPLICANT: Pereira, Suzette L.
: TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
: FILE REFERENCE: 6763 US.01
: CURRENT APPLICATION NUMBER: US/10/431,952
: PRIORITY FILING DATE: 2003-05-08
: PRIOR APPLICATION NUMBER: US/09/769,863
: NUMBER OF SEQ ID NOS: 32
: SOFTWARE: FastSeq for Windows Version 4.0
: SEQ ID NO 21
: LENGTH: 914
: TYPE: DNA
: ORGANISM: Homo sapiens
US-10-431-952-21

```

## Alignment Scores:

```

Pred. No.: 6,96e-97 Length: 914
Score: 941.50 Matches: 155
Percent Similarity: 72.73% Conservative: 43
Best Local Similarity: 57.69% Mismatches: 73
Query Match: 60.08% Indels: 5
Gaps: 2

```

US-09-624-670-63 (1-292) x US-10-431-952-21 (1-914)

```

Qy 4 LeuLysAlaPheAspAsnGlnValAlaAsnAlaPheLeuAspAsnMetPheGlyProArgAsp 23
Db 1 ATGGAACATTTTATGATGATCATCTAGTACTATTTCAGGATGTGCTAGGCCCTCGAGAT 60

```

```

Qy 24 SerArgValArgGlyTrpPheLeuLeuAspSerTyrLeuProThrPheIleLeuThrIle 43
Db 61 ACTAGAGTAAAGAGATGGTTTCTTCTGACATTTATTAACCACTTTATGTGCTCTCTC 120
Qy 44 ThrTyrLeuLeuSerIleTrpLeuGlyAsnLysTyrMetLysAsnArgProAlaLeuSer 63
Db 121 ATATATTCTATATTGTATGCTGGACCGAAATATCATAGAGAAATAAACCACTTCTCT 180
Qy 64 LeuArgGlyIleLeuThrIleuTyrAsnLeuAlaIleThrLeuLeuSerAlaTyrMetLeu 83
Db 181 TGCCGGGAGATTTTATGTGTGTATTAACCTTGACACCACTGCTCTCTGTATATGTC 240
Qy 84 ValGluIleLeuSerSerTrpGlnGlyGlyTyrAsnLeuGlnCyGlnAsnLeuAsp 103
Db 241 TGTAGATTGTATACAGAGATAGGAGAAAGCAATCACTTCTGTGACGGCAGCAGC 300
Qy 104 SerAlaGlyGlnGlyAspValArgValAlaLysValIeuTrpTyrTyrPheSerLys 123
Db 301 ACCGACAGAGAAATCAGATATGAAGATATCCGTCCTGTGGTGTACTACTTCTCAAA 360
Qy 124 LeuValGluPheLeuAspThrIlePhePheValIeuArgLysLysThrAsnGlnIleThr 143
Db 361 CTGATGAAATTTATGAGCACTTTCTTTCATCTGCGGAGAAACACCAACCAAGTACG 420
Qy 144 PheLeuHsValIyThiShiSaIaSerMetPheAsnIleTyrTrpCyValIeuAsnTrp 163
Db 421 GTCTTGACCTTACCCACCATGCTGCATGCTGAACATCTGGTGTGTGATGAACCTGG 480
Qy 164 IleProCyGlyGlnSerPhePheGlyProThrIleuAsnSerPheIleShiSleuMet 183
Db 481 GTCCCTGCGGCGCCTCTTTATTTGGTCCACCTTAATAGCTTCACTCCACGCTCCATG 540
Qy 184 TyrSerTyrTyrGlyLeuSerValPheProSerMetHisLysTyrIleuTrpTrpLys 203
Db 541 TACTCTACTAGTGGTTGTGTGTCAGTCCCTTCATCGCTGCACCTGCTGGAGAAAG 600
Qy 204 TyrLeuThiGlnAlaGlnLeuValGlnPheValIeuThiIleThiShiThiLeuSerIa 223
Db 601 TACATCACTAGGAGGCGAGCTGTCACTGTGTGCTGACATCATCCAGACCAAGCTGCGG 660
Qy 224 ValValIyProCyGlyPheProPheGlyCySleuIlePheGlnSerSerTyrMetMet 243
Db 661 GTCATCTGCGCGTGCACATTCCTCTTGGTGTGTATTCAGATTGGATACATTATT 720
Qy 244 ThrIleuValIleuPheLeuAsnPheTyrIleGlnThrTyrArgLysLysProValIys 263
Db 721 TCCCTGATGCTCTCTTCAACAACCTTCACTTCAAGACTCAACAAGAGAGGCGCTCC 780
Qy 264 LysGluLeuGlnGlu---LysGluValIySaengIyPheProLysAlaHisIleuIleVal 282
Db 781 CGAAGGAAGAACCACTGAAAGGACCAACCAAGATGG-----TCCGTGGCTGCT 828
Qy 283 AlaAsnGlyMetThrAsp 288
Db 829 GTGATGACACACCAAC 846

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Search completed: April 1, 2004, 13:04:57  
Job time: 393.345 secs

GenCore version 5.1.6  
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OM protein - nucleic search, using frame\_plus\_p2n model

Run on: April 1, 2004, 10:32:28 ; Search time 397.655 Seconds

(without alignments)  
2811.928 Million cell updates/sec

Title: US-09-624-670-64

Perfect score: 1651  
Sequence: 1 MEHFDASLSTYFAFLGPRD.....HTMSFSLSNVSKPKRKRD 299

Scoring table:

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Xgapop 10.0, Xgapext 0.5  
Ygapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Dgapop 6.0, Dextext 7.0

Searched: 2465228 seqs, 1869659620 residues

Total number of hits satisfying chosen parameters: 4930456

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

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-O=/cg2\_1/USPFO.spool/US09624670/rnatc\_30032004\_071121\_14140/app.query.fasta\_1.910  
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-TRANS=human40.cdi -LIST=45 -DOCALLIGN=200 -THR SCORE=pct -THR MAX=100  
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Database : Published Applications NA:\*

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11: /cg2\_6/ptodata/2/pubpna/US09\_PUBCOMB.seq:\*  
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13: /cg2\_6/ptodata/2/pubpna/US10\_PUBCOMB.seq:\*  
14: /cg2\_6/ptodata/2/pubpna/US10\_PUBCOMB.seq:\*  
15: /cg2\_6/ptodata/2/pubpna/US10\_PUBCOMB.seq:\*  
16: /cg2\_6/ptodata/2/pubpna/US10\_NEW\_PUB.seq:\*  
17: /cg2\_6/ptodata/2/pubpna/US60\_NEW\_PUB.seq:\*  
18: /cg2\_6/ptodata/2/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match Length	ID	Description
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Result No.	Score	Query Match Length	ID	Description
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2	1651	100.0	900	US-10-156-911-6
3	1558	94.4	914	US-09-903-456-3
4	1558	94.4	914	US-09-769-863-21
5	1558	94.4	914	US-10-156-911-3
6	1558	94.4	914	US-10-054-534B-21
7	1558	94.4	914	US-10-408-736-3
8	1558	94.4	914	US-10-431-992-21
9	1343	81.3	1997	US-10-264-237-96
10	1108	67.1	871	US-09-764-868-355
11	1069	64.7	748	US-09-764-868-352
12	956.5	57.9	879	US-09-903-456-5
13	956.5	57.9	879	US-09-849-139A-22
14	956.5	57.9	879	US-10-120-637A-22
15	956.5	57.9	879	US-10-156-911-5
16	954.5	57.8	2426	US-10-198-846-13406
17	953.5	57.8	2340	US-10-054-270A-91
18	953.5	57.8	2340	US-10-342-867-1707
19	724	43.9	2225	US-09-925-301-248
20	653.5	39.6	1203	US-10-112-944-217
21	653.5	39.6	2219	US-10-094-749-317
22	557	33.7	360	US-10-125-968-74
23	548	33.2	364	US-09-918-995-37438
24	492	29.8	430	US-09-918-995-37438
25	476.5	28.9	1472	US-10-024-298A-28
26	476.5	28.9	1472	US-10-042-211A-28
27	476.5	28.9	1482	US-09-809-391-258
28	476.5	28.9	1482	US-09-882-171-258
29	476.5	28.9	1542	US-09-809-391-106
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31	464	28.1	3670	US-10-205-823-125
32	459.5	27.8	1011	US-10-264-237-1068
33	448	27.1	2091	US-10-342-887-152
34	445	27.0	1682	US-09-822-830A-345
35	406.5	24.6	873	US-10-250-553-9
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39	406.5	24.6	17752	US-10-250-821-28
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43	395.5	24.0	819	US-10-156-911-7
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## ALIGNMENTS

RESULT 1  
US-09-903-456-6  
Sequence 6, Application US/09903456  
Patent No. US20020138874A1  
GENERAL INFORMATION:  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Predip  
APPLICANT: Huang, Amanda Eun-Yeong  
APPLICANT: Leong, Yung-Sheng  
APPLICANT: Pereira, Suzette L.  
TITLE OF INVENTION: BLOMGASE GENES AND USES THEREOF  
FILE REFERENCE: 6407 US P3  
CURRENT APPLICATION NUMBER: US/09/903,456  
CURRENT FILING DATE: 2001-07-11  
PRIOR APPLICATION NUMBER: US 09/624,670  
PRIOR FILING DATE: 2000-07-24  
PRIOR APPLICATION NUMBER: US 09/379,095  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: US 09/145,828  
PRIOR FILING DATE: 1998-09-02  
NUMBER OF SEQ ID NOS: 116  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 6  
LENGTH: 900

TYPE: DNA  
ORGANISM: Mus musculus  
US-09-903-456-6

## Alignment Scores:

Pred. No.:	3,976-181	Length:	900
Score:	1651.00	Matches:	299
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	9	Gaps:	0

US-09-624-670-64 (1-299) x US-09-903-456-6 (1-900)

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QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValAlaPheLeuGlyProArgAsp 20
Db 1 ATGGAACATTTCAGATGGTCACTCACTACCTTTCACAGCCCTTCTGCGCCCGGAGAT 60
QY 21 ThrArgValIysGlyTyrPheLeuLeuAspPheTyrIleProThrPheValCysSerVal 40
Db 61 ACAAGAGTCAAGAGATGGTCTCTCGGACCAATTACATCCCTACCGTTGTCTGTCTGTT 120
QY 41 IleTyrLeuLeuValTyrPheLeuGlyProLysTyrMetLysAsnArgGlnProPheSer 60
Db 121 ATTACTTACTCTATGTATGGCTGGAGCCAAATACATGAAGACCGGACCGCTTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe 80
Db 181 TGCCGAGGATCCCGGAGTGTATTAACCTTGACCTCAGCTGCTGTCTCTACATGTTTC 240
QY 81 TyrGlnLeuValThrGlyValTyrGlnGlyLysTyrAsnPhePheCysGlnGlyThrArg 100
Db 241 TATGAGTGTGTGACAGGTGTGGAGGGGCAATACAACTTTTGTCCAGGAGACAGC 300
QY 101 SerAlaGlyLysSerAspMetLysIleIleArgValLeuTyrTyrTyrPheSerLys 120
Db 301 AGCCGGGAGATCCGATATGAGATCATCCGCTCTGTGTGTACTACTTCTCCAA 360
QY 121 LeuIleGlnPheMetAspThrPhePhePheIleLeuArgLysAsnAsnIleGlnIleThr 140
Db 361 CTCATCGAATTCATGGACACCTTTTCTTCATCTTCGCAAAACACCAACGACGATCC 420
QY 141 ValLeuHisValTyrHisAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
Db 421 GTGCTCATGTCTACCAACGCTACAGCTCAACATCTGTGTGTGTGTGTGTGTGTGTGT 480
QY 161 ValProCysGlyHisSerTyrPheGlyValThrLeuAsnSerPheIleHisValLeuMet 180
Db 481 GTTCCCTGGCGCCATTCATATTTTGGTGGACACTCAACAGCTTCATCATGCTCATG 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTyrTyrLys 200
Db 541 TACCGTACTATGGTGTCTCTCCATCCGCTCATCGCTCATCGCTCATCGGAAAAAG 600
QY 201 TyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrThrCysGly 220
Db 601 TACTTCACTCAAGGCGAGCTGTCCAGTTTGTGCTCAACATCATCCAGACGACCTGGGG 660
QY 221 ValPheTyrProCysSerPheProLeuGlyTyrLeuPhePheGlnIleGlyTyrMetIle 240
Db 661 GTCTTCTGGCCATGCTCTCTCTCTCTCGGCTGGCTGTCTTCAGATTGATACATGATT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnLysGlyValAspSer 260
Db 721 TCCCTGATTGCTCTCTTCAAACTTCTACATTCACATTCACAAAGAAAGGGGCTCT 780
QY 261 ArgArgLysAspHisLeuLysGlyHisGlnAsnGlySerValAlaValAsnGlyHis 280
Db 781 CGAGGAAAGCCACCTGAAAGGCGCACCAAGACGCGTCTGTGGCCCGCTCAACGAGAC 840
QY 281 ThrAsnSerPheProSerLeuGlnLeuSerValLysProArgLysGlnArgLysArg 299
Db 841 ACCAAGAGCTTCCCTCTCTGGAAGAACGCTGAACCCAGGAGGAGGAGGAGAT 897

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## RESULT 2

US-10-156-911-6

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/ Sequence 6, Application US/10156911
/ Publication No. US20030163845A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradipt
/ APPLICANT: Leonard, Amanda Eun-Yeong
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Perella, Suzanne L.
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407.US.P4
/ CURRENT APPLICATION NUMBER: US/10/156,911
/ PRIOR FILING DATE: 2002-10-01
/ PRIOR APPLICATION NUMBER: US 09/903,456
/ PRIOR FILING DATE: 2001-07-11
/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24
/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1999-08-23
/ PRIOR APPLICATION NUMBER: US 09/145,828
/ NUMBER OF SEQ ID NOS: 122
/ SOFTWARE: FastrSeq for Windows Version 4.0
/ SEQ ID NO 6
/ LENGTH: 900
/ TYPE: DNA
/ ORGANISM: Mus musculus
US-10-156-911-6

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## Alignment Scores:

Pred. No.:	3,976-181	Length:	900
Score:	1651.00	Matches:	299
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	14	Gaps:	0

US-09-624-670-64 (1-299) x US-10-156-911-6 (1-900)

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QY 21 ThrArgValIysGlyTyrPheLeuLeuAspPheTyrIleProThrPheValCysSerVal 40
Db 61 ACAAGAGTCAAGAGATGGTCTCTCGGACCAATTACATCCCTACCGTTGTCTGTCTGTT 120
QY 41 IleTyrLeuLeuIleValTyrPheGlyProLysTyrMetLysAsnArgGlnProPheSer 60
Db 121 ATTACTTACTCTATGTATGGCTGGAGCCAAATACATGAAGAACCGGACCGCTTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe 80
Db 181 TGCCGAGGATCCCGGAGTGTATTAACCTTGACCTCAGCTGCTGTCTCTACATGTTTC 240
QY 81 TyrGlnLeuValThrGlyValTyrGlnGlyLysTyrAsnPhePheCysGlnGlyThrArg 100
Db 241 TATGAGTGTGTGACAGGTGTGGAGGGGCAATACAACTTTTGTCCAGGAGACAGC 300
QY 101 SerAlaGlyLysSerAspMetLysIleIleArgValLeuTyrTyrTyrPheSerLys 120
Db 301 AGCCGGGAGATCCGATATGAGATCATCCGCTCTGTGTGTGTGTGTGTGTGTGTGTGT 360
QY 121 LeuIleGlnPheMetAspThrPhePhePheIleLeuArgLysAsnAsnIleGlnIleThr 140
Db 361 CTCATCGAATTCATGGACACCTTTTCTTCATCTTCGCAAAACACCAACGACGATCC 420
QY 141 ValLeuHisValTyrHisAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
Db 421 GTGCTCATGTCTACCAACGCTACATTCGATGCTGATGCTGATGATGATGATGATGATG 480

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QY 161 ValProCySGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
DB GTTCCCTGGCCCATTCATATTGGTGGCAACATCAAGCTTCATCCATGTCCTCATG 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrIleuTPTrpIlyS 200
DB 541 TACTGGTACTAGTGTCTCTCCCTCCATCCCGGCATGGGTCCCTACCTCTGTGGAAAAAG 600
QY 201 TyrIleThrGlnGlyGlyLeuValGlnPheValIleuThrIleIleGlnThrTrpCysGly 220
DB 601 TACATCACTCAAGGGCAGCTGTCCAGTTTGTCTGACATCAATCCAGACGACTCGGG 660
QY 221 ValPheTrpProCysSerPheProIleuGlyTrpLeuPheGlnIleGlyTyrMetIle 240
DB 661 GTCTTCTGGCCCATGCTCTCTCCCTCCCTCGGGTGGCTGTCTCCAGATTGATCAAGATT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIlySlyGlyAlaSer 260
DB 721 TCCCTGATTGCTCTCTTCAACAACCTTCACTTCAAGCTTCAACAAGAAAGGGGCTCT 780
QY 261 ArgArgIysAspHisLeuIlyGlyHisGlnAsnGlySerValAlaAlaValaAsnGlyHis 280
DB 781 CGAGAGAAAGAACCACTGTAAGGGCCACAGAACGGGTCTGTGGCCGCGTCAACGAGCAC 840
QY 281 ThrAsnSerPheProSerLeuGlnAsnSerValIlySProArgIlySglnArgIlySAsp 299
DB 841 ACCAACAAGCTTCCCTCTCCCTGGAAAAACGCTGAAGCCCGAGAGCGAAGGAT 897

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## RESULT 3

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US-09-903-456-3
/ Sequence 3, Application US/09903456
/ Patent No. US2002013874A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Leonard, Amanda Eun-Yeong
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407 US.P3
/ CURRENT APPLICATION NUMBER: US/09/903,456
/ PRIOR FILING DATE: 2001-07-11
/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24
/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1999-08-23
/ PRIOR APPLICATION NUMBER: US 09/145,828
/ PRIOR FILING DATE: 1998-09-02
/ NUMBER OF SEQ ID NOS: 116
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 3
/ LENGTH: 914
/ TYPE: DNA
/ ORGANISM: Homo sapiens
US-09-903-456-3

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## Alignment Scores:

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Pred. No.: 2,4e-170 Length: 914
Score: 1558.00 Matches: 278
Percent Similarity: 97.32% Conserved: 13
Best Local Similarity: 92.98% Mismatches: 8
Query Match: 94.37% Indels: 0
DB: 9 Gaps: 0

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US-09-624-670-64 (1-299) x US-09-903-456-3 (1-914)

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QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheIlySAlaPheLeuGlyProArgAsp 20
DB 1 ATGGAAACATTGTAAGCATCACTTAAGTACCAATTTCAGGATGTGCTAGGCCCTCGAGAT 60
QY 21 ThrArgValIlySgIlyTrpPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40
DB 61 ACTAGAGTAAAGAGATGGTTCCTCTGACAAATATATACCCACATTATCTGCTGCTGCT 120

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QY 41 IleTyrLeuLeuIleValITrPLeuGlyProIlySLeuMetIlySAsnArgIlnProPheSer 60
DB 121 ATATATTACCAATTTGATGGCTGGGCCAATAATACATGAGATTAACAAGCATCTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrIleuSerIleuTyrMetPhe 80
DB 181 TGCCGGGGGATTTAGTGGGTATATACCTTGGACTACACTGCTGTCTGTATATGTTTC 240
QY 81 TyrGluLeuValIThrGlyValITrPLeuGlyLeuTyrAsnPhePheCysGlnGlyTrpArg 100
DB 241 TGTAGATTAGTAAAGAGATGGATGGAGAGGAAATACATCTTCTTCTGTCAAGGCAACGC 300
QY 101 SerIlaGlyIleuSerAspMetIlySleIleArgValLeuTPTrpTyrTyrPheSerIlyS 120
DB 301 ACCGAGAGATACAGATATGAGATATACGATTCGCTGCTGTGGTACTACTTCTCCAAA 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgIlySAsnAsnHisGlnIleThr 140
DB 361 CTCTAGATTTATAGACACTTCTTCTTATCTCTGGCAAGAACACCAACCAAGATCAGC 420
QY 141 ValLeuHisValITyrHisAlaThrMetLeuAsnIleTPTrpPheValMetAsnTrp 160
DB 421 GTCCCTGACCGCTACCAACATGCTCGATGCTGAACATCTGCTGTGTGATGAGACTGG 480
QY 161 ValProCySGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
DB 481 GTCCCTGGCCCATCTTATTTTGGTGGCCACCTTAATAGCTTCAATCAACGCTCCACAG 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTPTrpIlySlyS 200
DB 541 TACTCTTACATAGTGTGTGTGTGTCAGTCCCTTCAATGCTCAATCACTCTGTGGAGAAAG 600
QY 201 TyrIleThrGlnGlyGlnLeuValGlnPheValIleuThrIleIleGlnThrTrpCysGly 220
DB 601 TACATCACTCAAGGGCAGCTGTCCAGTTTGTCTGACATCAATCCAGACGACTCGGG 660
QY 221 ValPheTrpProCysSerPheProIleuGlyTrpLeuPheGlnIleGlyTyrMetIle 240
DB 661 GTCACTGGCCGCTGCAATTCCTCTGTGGTGTGTATTCAGATGGATGATCAATATT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIlySlyGlyAlaSer 260
DB 721 TCCCTGATTGCTCTCTTCAACAACCTTCACTTCAAGCTTCAACAAGAAAGGGGCTCT 780
QY 261 ArgArgIysAspHisLeuIlyGlyHisGlnAsnGlySerValAlaAlaValaAsnGlyHis 280
DB 781 CGAAGAAAGAACCACTGTAAGGGCCACAGAACGGGTCTGTGGCCGCGTCAACGAGCAC 840
QY 281 ThrAsnSerPheProSerLeuGlnAsnSerValIlySProArgIlySglnArgIlySAsp 299
DB 841 ACCAACAAGCTTTCACCCCTGGAAAAACATGTAGACCAAGAGCTGGCGAAGAT 897

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## RESULT 4

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US-09-769-863-21
/ Sequence 21, Application US/09769863
/ Publication No. US20030157144A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Das, Tapas
/ APPLICANT: Thurmond, Jennifer
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
/ FILE REFERENCE: 6763 US.01
/ CURRENT APPLICATION NUMBER: US/09/769,863
/ PRIOR FILING DATE: 2001-01-25
/ NUMBER OF SEQ ID NOS: 32
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 21
/ LENGTH: 914
/ TYPE: DNA

```



ORGANISM: Homo sapiens  
US-09-769-863-21

## Alignment Scores:

Pred. No.:	2,4e-170	Length:	914
Score:	1558.00	Matches:	278
Percent Similarity:	97.32%	Conservative:	13
Best Local Similarity:	92.98%	Mismatches:	8
Query Match:	94.37%	Indels:	0
		Gaps:	0

US-09-624-670-64 (1-299) x US-09-769-863-21 (1-914)

```

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValAlaPheLeuGlyProArgAsp 20
Db 1 ATGGAACATTTTATGATGATCACTTAATACCTATTTCAAGGACCTGAGCCCTCGAGAT 60
QY 21 ThrArgValIleGlyTyrPheLeuLeuAspSerThrIleProThrPheValCysSerVal 40
Db 61 ACTGAGTAAAGAGATGTTCTTCTGACAAATTATACCACTTATCTGCTCTGTC 120
QY 41 IleTyrLeuLeuIleValTyrPheGlyProIleTyrMetLeuAsnArgGlnProPheSer 60
Db 121 ATATATTACTTAATTGATGCTGGACCAAAATATACATGAGAAATAACAGCCATTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPhe 80
Db 181 TGCCGGGGGATTTAGTGTGATAACTTGGACCTGACCTGCTCTGTATATGTTTC 240
QY 81 TyrGluLeuValThrGlyValTyrGluGlyTyrAsnPhePheCysGlnGlyThrArg 100
Db 241 TGGAGTTAGTAAACAGAGATATGGAAGCAATATCAATTTCTTGTCAAGGACACAGC 300
QY 101 SerAlaGlyLeuSerAspMetIleIleArgValLeuTyrTyrTyrPheSerIys 120
Db 301 ACCGACGAGAAATCAGATATGAAATATCCGTCCTGCTGCTGACTACTTCTCCAA 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgLysAsnArgGlnIleThr 140
Db 361 CTCTAGATTTTATGACACTTCTTCTTCACTCTGCGCAAGAACACCAACGATCTACG 420
QY 141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
Db 421 GTCCTGACGCTATACCACTGCTGATGCTGAAATCATCTGTTGTTGATGATGACG 480
QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
Db 481 GTCCCTCGCGGCACTTATTTGGTGCCACCTTAATAGCTTATCCACGCTCTCATG 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTyrTyrPheSer 200
Db 541 TACTCTTACTATGTTTGTGTCAGTCCCTTCCATGCCATCTGCTGCTGAGAAAG 600
QY 201 TyrIleThrGlnGlyLeuValGlnPheValLeuThrIleIleGlnThrThrCysGly 220
Db 601 TACTCAGCTCAGGAGGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
QY 221 ValPheTyrProCysSerPheProLeuGlyTyrPhePhePheGlnIleGlyTyrMetIle 240
Db 661 GTCTCTGCGCGGTGACATTTCCCTTGTGTTGTGTTGTGTTGTGTTGTGTTGTGTT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnLysValAlaSer 260
Db 721 TCCCTGATGCTCTCTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCACTT 780
QY 261 ArgArgGlyAspHisIleLeuLysGlyHisIleGlnArgLysValAlaValAlaGlnGly 280
Db 781 CGAAGGAAAGACCACTGGAAGGACCACTGGAAGGACCTGCTGCTGCTGCTGCTGCTG 840
QY 281 ThrAsnSerPheProSerLeuGlnAsnSerValLysProArgLysGlnArgLysAsp 299
Db 841 ACCAAGAGCTTTTACCCCTGGAAGAAATATGTAAGCCAGAGAACTCGGAGAGAT 897

```

## RESULT 5

US-10-156-911-3

Sequence 3, Application US/10156911

Publication No. US2003016345A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Leonard, Amanda Eun-Yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzette L.

FILE REFERENCE: 6407 US P4

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

CURRENT APPLICATION NUMBER: US/10/156,911

CURRENT FILING DATE: 2002-10-01

PRIOR APPLICATION NUMBER: US 09/903,456

PRIOR FILING DATE: 2001-07-11

PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 122

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3

LENGTH: 914

TYPE: DNA

ORGANISM: Homo sapiens

US-10-156-911-3

## Alignment Scores:

Pred. No.:	2,4e-170	Length:	914
Score:	1558.00	Matches:	278
Percent Similarity:	97.32%	Conservative:	13
Best Local Similarity:	92.98%	Mismatches:	8
Query Match:	94.37%	Indels:	0
		Gaps:	0

US-09-624-670-64 (1-299) x US-10-156-911-3 (1-914)

```

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValAlaPheLeuGlyProArgAsp 20
Db 1 ATGGAACATTTTATGATGATCACTTAATACCTATTTCAAGGACCTGAGCCCTCGAGAT 60
QY 21 ThrArgValIleGlyTyrPheLeuLeuAspSerThrIleProThrPheValCysSerVal 40
Db 61 ACTGAGTAAAGAGATGTTCTTCTGACAAATTATACCACTTATCTGCTCTGTC 120
QY 41 IleTyrLeuLeuIleValTyrPheGlyProIleTyrMetLeuAsnArgGlnIleThr 140
Db 121 ATATATTACTTAATTGATGCTGGACCAAAATATACATGAGAAATAACAGCCATTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPhe 80
Db 181 TGCCGGGGGATTTAGTGTGATAACTTGGACCTGACCTGCTCTGTATATGTTTC 240
QY 81 TyrGluLeuValThrGlyValTyrGluGlyTyrAsnPhePheCysGlnGlyThrArg 100
Db 241 TGGAGTTAGTAAACAGAGATATGGAAGCAATATCAATTTCTTGTCAAGGACACAGC 300
QY 101 SerAlaGlyLeuSerAspMetIleIleArgValLeuTyrTyrTyrPheSerIys 120
Db 301 ACCGACGAGAAATCAGATATGAAATATCCGTCCTGCTGCTGCTGCTGCTGCTGCTG 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgLysAsnArgGlnIleThr 140
Db 361 CTCTAGATTTTATGACACTTCTTCTTCACTCTGCGCAAGAACACCAACGATCTACG 420
QY 141 ValLeuHisValTyrHisIleAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
Db 421 GTCCTGACGCTATACCACTGCTGATGCTGAAATCATCTGTTGTTGATGATGACG 480
QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180

```





TYPE: DNA  
ORGANISM: Homo sapiens  
US-10-408-736-3

## Alignment Scores:

Pred. No.:	Length:	Matches:	Conservative:	Mismatches:	Indels:	Gaps:
2,4e-170	914	278	13	8	0	0
Score:	1558.00					
Percent Similarity:	97.32%					
Best Local Similarity:	92.98%					
Query Match:	94.37%					

US-09-624-670-64 (1-299) x US-10-408-736-3 (1-914)

```

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValAlaPheLeuGlyProArgAsp 20
Db 1 ATGGAACATTTGATGATCATCATGTTACTTATTTCAAGGACTTGAGGCGCTCGAGAT 60
QY 21 ThrArgValIleGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40
Db 61 ACTAGAGTAAAGAGAGTGTCTCTGGAACAATTATTAACCACTTATCTGCTGTC 120
QY 41 IleTyrLeuLeuIleValTyrPheGlyProIleTyrMetIleAsnArgGlnProPheSer 60
Db 121 ATATATTACTTAATTTGATGCTGGGACCAAAATACAGAGAAATAACCACTTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPhe 80
Db 181 TGCCGGGGATTTTACTGATGATTAACCTTGAGACTCACACGCTGCTCTGATATATGTT 240
QY 81 TyrGluLeuValThrGlyValTyrGluGlyIleTyrAsnPhePheCysGlnGlyThrArg 100
Db 241 TGTGAGTGTAAACAGAGATGAGAGGAGCAATACCACTTCTGTCAGGGGACACGC 300
QY 101 SerAlaGlyLeuSerAspMetIleIleArgValLeuTyrTyrTyrPheSerIle 120
Db 301 ACCGAGAGAAATCAATATGAAGATTATCCGTGCTGCTGCTGCTGCTGCTGCTGCTG 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgGlyAsnAsnHisGlnIleThr 140
Db 361 CTCATAGATTTATGACACTTCTCTCTCATCCGCGCAAGAACACCAACATATACG 420
QY 141 ValLeuHisValTyrHisHisAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
Db 421 GTCTGACAGCTTACCAACATGCTGATGCTGAAACATGCTGCTGCTGCTGCTGCTG 480
QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
Db 481 GTCCCTGGCGGCACTTATTTGGTGCACACTTAATAGCTTATCAGCTCCTCATG 540
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTyrTyrIle 200
Db 541 TACTCTTACTATGATTGTGCTGATGCTTCCATGCGCTCATACCTCTGAGGAGAG 600
QY 201 TyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrThrCysGly 220
Db 601 TACATCACTCAGGGGAGGAGTGTGCTGATTTGCTGCAACATCATCAACAGCAGCGGG 660
QY 221 ValPheTyrProCysSerPheProLeuGlyTyrPhePhePheGlnIleGlyTyrMetIle 240
Db 661 GTATCTGGCGGCACTTATTTGGTGTGATGATTTCCAAATGGATTAACATTAAT 720
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleGlyValAsn 260
Db 721 TCCCTGATTTGCTCTTCCACAACTTCTCATTCACAGCTTCAACAAAGAGGCGCTCC 780
QY 261 ArgArgIleAspHisLeuIleGlyHisGlnAsnGlySerValAlaIleValAsnGlyHis 280
Db 781 CGAAGGAAGAACCACTGAAAGACCAAGAAATGGATCGCTGCTGCTGCTGCTGCTG 840
QY 281 ThrAsnSerPheProSerLeuGlnIleValIleProArgGlyGlnIleValAsp 299
Db 841 ACCAAGAGCTTTTCAACCTTGGAAACATGTGAAGCCAGAGAGCTGCGAAGAT 897

```

## RESULT 8

US-10-431-952-21

Sequence 21, Application US/10431952

Publication No. US20030190733A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Huang, Yung-Sheng

APPLICANT: Das, Tapas

APPLICANT: Thurmond, Jennifer

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

FILE REFERENCE: 6763.US.01

CURRENT APPLICATION NUMBER: US/10/431,952

PRIOR FILING DATE: 2003-05-08

PRIOR APPLICATION NUMBER: US/09/769,863

PRIOR FILING DATE: 2001-01-25

NUMBER OF SEQ ID NOS: 32

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 21

LENGTH: 914

TYPE: DNA

ORGANISM: Homo sapiens

US-10-431-952-21

## Alignment Scores:

Pred. No.:	Length:	Matches:	Conservative:	Mismatches:	Indels:	Gaps:
2,4e-170	914	278	13	8	0	0
Score:	1558.00					
Percent Similarity:	97.32%					
Best Local Similarity:	92.98%					
Query Match:	94.37%					

US-09-624-670-64 (1-299) x US-10-431-952-21 (1-914)

```

QY 1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValAlaPheLeuGlyProArgAsp 20
Db 1 ATGGAACATTTGATGATCATCATGTTACTTATTTCAAGGACTTGAGGCGCTCGAGAT 60
QY 21 ThrArgValIleGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40
Db 61 ACTAGAGTAAAGAGAGTGTCTCTGGAACAATTATTAACCACTTATCTGCTGTC 120
QY 41 IleTyrLeuLeuIleValTyrPheGlyProIleTyrMetIleAsnArgGlnProPheSer 60
Db 121 ATATATTACTTAATTTGATGCTGGGACCAAAATACAGAGAAATAACCACTTCTCT 180
QY 61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuSerLeuTyrMetPhe 80
Db 181 TGCCGGGGATTTTACTGATGATTAACCTTGAGACTCACACGCTGCTCTGATATATGTT 240
QY 81 TyrGluLeuValThrGlyValTyrGluGlyIleTyrAsnPhePheCysGlnGlyThrArg 100
Db 241 TGTGAGTGTAAACAGAGATGAGAGGAGCAATACCACTTCTGTCAGGGGACACGC 300
QY 101 SerAlaGlyLeuSerAspMetIleIleArgValLeuTyrTyrTyrPheSerIle 120
Db 301 ACCGAGAGAAATCAATATGAAGATTATCCGTGCTGCTGCTGCTGCTGCTGCTGCTG 360
QY 121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgGlyAsnAsnHisGlnIleThr 140
Db 361 CTCATAGATTTATGACACTTCTCTCTCATCCGCGCAAGAACACCAACATATACG 420
QY 141 ValLeuHisValTyrHisHisAlaThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
Db 421 GTCTGACAGCTTACCAACATGCTGATGCTGAAACATGCTGCTGCTGCTGCTGCTG 480
QY 161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
Db 481 GTCCCTGGCGGCACTTATTTGGTGTGATGATTTCCAAATGGATTAACATTAAT 200
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTyrTyrIle 220

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Db 1 GGCAATACAACTCTCTCTGACGGACACGACCGACGAGAAATGATGAAAT 60  
 Qy 110 |||||ValleuThrPrrTyrrPheSerLysLeuIleGluPheMetAspThrPhe 129  
 Db 61 ATCCGTCCTCTGAGTGGTACTCTCTCCAACTCATGAAATTTATGACACTTCTTC 120  
 Qy 130 PheIleuAryLysAenAenHISGlnIleThrValLeuHISValTyrrHisIleAthr 149  
 Db 121 TTGATCTGCGCAAGAACACACACGATCAGGCTCTGACAGTCTACACACATCCGCG 180  
 Qy 150 MetLeuAnIleTrrPrrPheValMetAspTrrValProCysGlyHisSerTyrrPheGly 169  
 Db 181 ATGCTGAACATCTGGTGGTGTGATGAAGTGGGTCCTCGGCGCACCTTTATTTGT 240  
 Qy 170 AlaThrLeuAnSerPheIleHISValLeuMetTyrrSerTyrrTyrrGlyLeuSerSerIle 189  
 Db 241 GCCCACTTAAATACCTTCACTCCAGCTCCATATCTTACTATGGTTTGGCGTCACTC 300  
 Qy 190 ProSerMetArgProTyrrLeuTrrPrrPrrLysLysTyrrIleThrGlnGlyLeuValGln 209  
 Db 301 CCTTCATGCGTCATACCTCTGCTGAGAAAGATACATCATCAGGCGCAGCTGCTCAG 360  
 Qy 210 PheValLeuThrIleIleGlnThrPrrCysGlyValPheTrrProCysSerPheProLeu 229  
 Db 361 TTGTGCTGAACATCATCCAGACAGCTGGGGGTATCTGGCGGACATTCCTCTT 420  
 Qy 230 GlyTrrPhePhePheGlnIleGlyTyrrMetIleSerLeuIleAlaLeuPheThrAspPhe 249  
 Db 421 GGTTGGTGTATTTCCGATTTGGATTCATGATTTCCCTGATTGCTCTTCCAAACTTC 480  
 Qy 250 TyrrIleGlnThrTyrrAnLysLysGlyAlaSerArgArgLysAspHisLeuLysGlyHis 269  
 Db 481 TACATTGACCTCAACACAGAAAGGGCTCCCGAAGAAAGACACCTGAAGACACAC 540  
 Qy 270 GluAsnGlySerValAlaAlaValIleAsnGlyHisThrAsnSerPheProSerLeuGlnAsn 289  
 Db 541 CAGATGGGTCCATGGTGTCTGTGAATGACACACCAACAGCTTTTACCCCTGGAAGAC 600  
 Qy 290 SerValLysProArgLysGlnArgLysAsp 299  
 Db 601 AATGTGAAGCCAAAGAAAGCTGCGAAGAGAT 630

## RESULT 11

US-09-764-868-352  
 ; Sequence 352, Application US/09764868  
 ; Patent No. US20020168711A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Rosen et al.  
 ; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
 ; FILE REFERENCE: PT232  
 ; CURRENT APPLICATION NUMBER: US/09/764,868  
 ; PRIORITY FILING DATE: 2001-01-17  
 ; PRIOR APPLICATION DATA REMOVED - refer to PALM or file wrapper  
 ; NUMBER OF SEQ ID NOS: 1510  
 ; SOFTWARE: PatentIn Ver. 2.0  
 ; SEQ ID NO 352  
 ; LENGTH: 748  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: SITE  
 ; LOCATION: (702)  
 ; OTHER INFORMATION: n equals a,t,c,g, or c  
 ; NAME/KEY: SITE  
 ; LOCATION: (721)  
 ; OTHER INFORMATION: n equals a,t,c,g, or c  
 ; US-09-764-868-352

## Alignment Scores:

Pred. No.: 7,628-114 Length: 748  
 Score: 1069.00 Matches: 188  
 Percent Similarity: 98.48% Conservative: 7  
 Best Local Similarity: 94.95% Mismatches: 3

## Query Match:

64.75%

Indels: 0  
Gaps: 0

US-09-624-670-64 (1-299) x US-09-764-868-352 (1-748)

9

0

Db 1 MetGluHisPheAspAlaSerLeuSerThrTyrrPheLysAlaPheLeuGlyProArgAsp 20  
 Db 107 ATGACACATTTTGAATGATCACTAGTACTTATTAAGGATGATGAGCCCTCGAGAT 166  
 Qy 21 ThrArgValLysGlyTrrPheLeuLeuAspAnTyrrIleProThrPheValCysSerVal 40  
 Db 167 ACTAGATGAAGATGTTCTCTTGTGACATATATATACCAATTAATATGCTCTGTC 226  
 Qy 41 IleTyrrLeuLeuIleValTrrPheGlyProLysTyrrMetLysAenArgLysProPheSer 60  
 Db 227 ATATATTACTAATTGATAGTGTGGACCAAAATACAGAGAAATTAACACCAATTCCT 286  
 Qy 61 CysArgGlyTrrLeuGlnLeuTyrrAnLysLysTyrrIleArgValLeuTrrTyrrPheSerLys 80  
 Db 287 TGCCGGGGGATTTTGTGTGTATACCTTGACACACATCGCTGCTGTATATGTTTC 346  
 Qy 81 TyrrGluLeuValThrGlyValTrrGlyLysTyrrAnPhePheCysGlnGlyThrArg 100  
 Db 347 TGTGAGTTTGTAAACGAGATAGGAGACCAATTAACACTTCTCTGACGGCACACGC 406  
 Qy 101 SerAlaGlyGluSerAspMetLysIleIleArgValLeuTrrTyrrTyrrPheSerLys 120  
 Db 407 ACCGACAGAGAAATCAAGATATGAAGATATCCGTCCTGCTGTGATCTTCCAAA 466  
 Qy 121 LeuIleGluPheMetAspThrPhePheIleLeuArgLysAenAenHISGlnIleThr 140  
 Db 467 CTATATGAATTTATGACACTTCTTCTTCACTCCGCGCAAGAAACACACCAATATACG 526  
 Qy 141 ValLeuHisValTyrrHisIleAlaThrMetLeuAnIleTrrPrrPheValMetAspTrr 160  
 Db 527 GTCCCTCAGCTTACACCATCATGCTGATGCTGAACATCTGCTGTGTGTAAGACTGG 586  
 Qy 161 ValProCysGlyHisSerTyrrPheGlyAlaThrLeuAnSerPheIleHisValLeuMet 180  
 Db 587 GTCCCTCGGGCACCTTATTTTGGGCCACACTTAATTAACCTTCATCCAGTCTCATG 646  
 Qy 181 TyrrSerTyrrTyrrGlyLeuSerSerIleProSerMetArgProTyrrLeuTrrPrr 198  
 Db 647 TACTCTTACTATGCTTGTGTGTCAGTCCCTTCATGCTCATACCTCTGCTG 700

## RESULT 12

US-09-903-456-5  
 ; Sequence 5, Application US/09903456  
 ; Patent No. US20020138874A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407 US P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; PRIORITY FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIORITY FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 5  
 ; LENGTH: 879  
 ; TYPE: DNA  
 ; ORGANISM: Mus musculus  
 ; US-09-903-456-5

## Alignment Scores:

Pred. No.: 1,056-100 Length: 879  
 Score: 956.50 Matches: 168  
 Percent Similarity: 71.58% Conservative: 36  
 Best Local Similarity: 58.95% Mismatches: 78  
 Query Match: 57.93% Indels: 3  
 Gaps: 1

US-09-624-670-64 (1-299) x US-09-903-456-5 (1-879)

```

QY 1 MetGluHisphaeapalaSerLeuSerThrTyRphelYsAlaPheLeuGlyProArgasp 20
Db 10 CTGAAGGCGCTTGAATGAAGTCAATGCTTCTTGACAAACATGTTGGACACAGAT 69
QY 21 ThrArgValysGlyTrpPheLeuLeuAspAsnTrpLleProThrPheValCysSerVal 40
Db 70 TCTCGAGTTCGGGGGTGCTCTGCTGAGCTTCACTTCCACCTTCACTTCCACCATC 129
QY 41 IleTyRLeuLeuLeuValTrpLeuGlyProArgTyRMetYsAsnArgGlnProPheSer 60
Db 130 ACGTACGCTGCTCTGATATGCTGCGGTACAGATACATGAAGAAGAGCGCTGCTGCT 189
QY 61 CysArgGlyLleLeuGlnLeuTyRAsnLeuGlyLeuThrLeuLeuSerLeuTyRMetPhe 80
Db 190 CTCAGGGGCACTCCCTCACTTGAATACCTCGCAATCACTTCTTCTGCGTATAGCTG 249
QY 81 TyRLeuLeuValThrGlyValTrpGlnGlyLysTyRAsnPhePheCysGlnGlyThrArg 100
Db 250 GTGAGGCTCATCTCTTCCAGCTGGAGAGAGGTTACAATCTTGCACTGTCAGAACTTCGAC 309
QY 101 SerAlaGlyGlnSerAspMetLysLleLeuArgValLeuTrpTyRTrpPheSerLys 120
Db 310 AGTCAGAGAGAGAGAGATGATGCTCGGGTAGCCAGGCTTGTGTGCTACTTCTCCAAA 369
QY 121 LeuLleGlnPheMetAspThrPhePheLleLeuArgLysAsnAsnLleGlnLleThr 140
Db 370 CTAGGAGATTCCTGGACACATTTCTTGTGTAGAAAAAAGACCAATCGATCACCC 429
QY 141 ValLeuHisValTyRHisAlaThrMetLeuAsnLleTrpTrpPheValMetAsnTrp 160
Db 430 TTCCTTCACTGCTATACACACAGCGCTCACTTCAATCTGTGTGTGTGTGTGAATCG 489
QY 161 ValProCysGlyHisSerTrpPheGlyAlaThrLeuAsnSerPheLleHisValLeuMet 180
Db 490 ATACCTGTGTCAGAAAGGCTCTTGTGACCCAGCCAGCAAGCTTATCCACTTTCATG 549
QY 181 TyRserTyRTrpGlyLeuSerSerLleProSerMetArgProTyRLeuTrpTyRTrp 200
Db 550 TACTCTTACTACGCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 609
QY 201 TyRLeuThrGlnGlyGlnLeuValGlnPheValLeuThrLleLleGlnThrTrpCysGly 220
Db 610 TACCTCACACAGGCTCAGCTGTGAGTTCGATCTACACATCAGACACAGCTGAGTCC 669
QY 221 ValPheTrpProCysSerPheProLeuGlyTrpPhePheGlnLleGlyTyRMetLle 240
Db 670 GTGGTGAAGCCCTGTGCTTCCCTTGTGCTGTCTTCCAGTCTTCCCTTGAATGAGT 729
QY 241 SerLeuLleAlaLeuPheThrAsnPheTyRLeuGlnThrTyRAsnLysGlyAlaSer 260
Db 730 ACGCTGCTATCCTTCTTAACTTCAATTCAGACATACCGGAAAGAGCCAGAGAG 789
QY 261 Arg-----ArgLysAspHisLeuLeuGlyHisGlnAsnGlySerValAlaAlaVal 277
Db 790 AAAGAGCTGCAAGAGAAAGAGTGAAGATGTTCCTCCAAAGCCCACTTAATTTGTGCT 849
QY 278 AsnGlyHisThrAsn 282
Db 850 AATGGCATGACGAC 864

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RESULT 13  
 US-09-849-199A-22  
 ; Sequence 22, Application US/09849199A

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; Publication No. US20030082754A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: MurexJl, Pradip
; APPLICANT: Thurnmond, Jennifer M.
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Dae, Tapas
; TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 6804.US.01
; CURRENT APPLICATION NUMBER: US/09/849,199A
; CURRENT FILING DATE: 2002-04-15
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 879
; TYPE: DNA
; ORGANISM: Mus musculus
; US-09-849-199A-22

Alignment Scores:
Pred. No.: 1,056-100 Length: 879
Score: 956.50 Matches: 168
Percent Similarity: 71.58% Conservative: 36
Best Local Similarity: 58.95% Mismatches: 78
Query Match: 57.93% Indels: 3
Gaps: 1

US-09-624-670-64 (1-299) x US-09-849-199A-22 (1-879)

QY 1 MetGluHisphaeapalaSerLeuSerThrTyRphelYsAlaPheLeuGlyProArgasp 20
Db 10 CTGAAGGCGCTTGAATGAAGTCAATGCTTCTTGACAAACATGTTGGACACAGAT 69
QY 21 ThrArgValysGlyTrpPheLeuLeuAspAsnTrpLleProThrPheValCysSerVal 40
Db 70 TCTCGAGTTCGGGGGTGCTCTGCTGAGCTTCACTTCCACCTTCACTTCCACCATC 129
QY 41 IleTyRLeuLeuLeuValTrpLeuGlyProArgTyRMetYsAsnArgGlnProPheSer 60
Db 130 ACGTACGCTGCTCTGATATGCTGCGGTACAGATACATGAAGAAGAGCGCTGCTGCT 189
QY 61 CysArgGlyLleLeuGlnLeuTyRAsnLeuGlyLeuThrLeuLeuSerLeuTyRMetPhe 80
Db 190 CTCAGGGGCACTCCCTCACTTGAATACCTCGCAATCACTTCTTCTGCGTATAGCTG 249
QY 81 TyRLeuLeuValThrGlyValTrpGlnGlyLysTyRAsnPhePheCysGlnGlyThrArg 100
Db 250 GTGAGGCTCATCTCTTCCAGCTGGAGAGAGGTTACAATCTTGCACTGTCAGAACTTCGAC 309
QY 101 SerAlaGlyGlnSerAspMetLysLleLeuArgValLeuTrpTyRTrpPheSerLys 120
Db 310 AGTCAGAGAGAGAGATGATGCTCGGGTAGCCAGGCTTGTGTGCTACTTCTCCAAA 369
QY 121 LeuLleGlnPheMetAspThrPhePheLleLeuArgLysAsnAsnLleGlnLleThr 140
Db 370 CTAGGAGATTCCTGGACACATTTCTTGTGTAGAAAAAAGACCAATCGATCACCC 429
QY 141 ValLeuHisValTyRHisAlaThrMetLeuAsnLleTrpTrpPheValMetAsnTrp 160
Db 430 TTCCTTCACTGCTATACACACAGCGCTCACTTCAATCTGTGTGTGTGTGTGAATCG 489
QY 161 ValProCysGlyHisSerTrpPheGlyAlaThrLeuAsnSerPheLleHisValLeuMet 180
Db 490 ATACCTGTGTCAGAAAGGCTCTTGTGACCCAGCCAGCAAGCTTATCCACTTTCATG 549
QY 181 TyRserTyRTrpGlyLeuSerSerLleProSerMetArgProTyRLeuTrpTyRTrp 200
Db 550 TACTCTTACTACGCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 609
QY 201 TyRLeuThrGlnGlyGlnLeuValGlnPheValLeuThrLleLleGlnThrTrpCysGly 220
Db 610 TACTCTCACACAGGCTCAGCTGTGAGTTCGATCTACACATCAGACACAGCTGAGTCC 669

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QY 221 ValPheTrpProCysSerPheProLeuGlyTrpLeuPhePheGlnIleGlyTyrMetIle 240
DB 670 GTGTGAAGCCCTTGTCGCTTCCCTTGGCTGCTTCATCTTCACATCTTCTCTAATATG 729
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleValSer 260
DB 730 ACCGTGTCATCTGTTCTTAACCTTCATATTCAGACATACCGGAAAGCCAGCTGAG 789
QY 261 Arg-----ArgIleAspHisLeuIleValIleGlnIleValIleValIle 277
DB 790 AAAGAGCTGCAGAGAAAGAGTAAGTAATGGTTTCCCAAGCCCACTTAATTGTGCT 849
QY 278 AsnGlyHisThrAsn 282
DB 850 AATGGCATGACGGAC 864

RESULT 14
US-10-120-637A-22
/ Sequence 22, Application US/10120637A
/ Publication No. US2003013440A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Hammond, Jennifer M.
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Das, Tapas
/ APPLICANT: Leonard, Amanda E.
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES
/ FILE REFERENCE: 6804, US, P1
/ CURRENT APPLICATION NUMBER: US/10/120,637A
/ PRIOR FILING DATE: 2002-04-11
/ PRIOR APPLICATION NUMBER: US 09/849,199
/ PRIOR FILING DATE: 2001-05-04
/ NUMBER OF SEQ ID NOS: 73
/ SOFTWARE: FASTSEQ for Windows Version 4.0
/ SEQ ID NO 22
/ LENGTH: 879
/ TYPE: DNA
/ ORGANISM: Mus musculus
US-10-120-637A-22

Alignment Scores:
Pred. No.: 1,05e-100 Length: 879
Score: 956.50 Matches: 168
Percent Similarity: 71.58 Conservative: 36
Best Local Similarity: 58.954 Mismatches: 78
Query Match: 57.934 Indels: 3
DB: 14 Gaps: 1

US-09-624-670-64 (1-299) x US-10-120-637A-22 (1-879)
QY 1 MetGlnHisPheAspLaserLeuSerThrTyrPheIleValAlaPheLeuGlyProArgAsp 20
DB 10 CTAAAGCCCTTATATATAAGTCATGTTCTTGGACACACATGTTGGACCGAGAT 69
QY 21 ThrArgValIleGlyTyrPheLeuLeuAsnPheTyrIleProThrPheValCysSerVal 40
DB 70 TCTCGAGTTCGGCGGGGTTCTCTGCTGACCTTCACTTCCACCTTCATCTCACCATC 129
QY 41 IleTyrLeuLeuIleValTrpLeuGlyProIleTyrMetIleAsnArgGlnProPheSer 60
DB 130 ACCTACCTGCTCTCGATATGCTGGGTAACAGTACATGAAAGACAGCCCTGCTGTGCT 189
QY 61 CysArgGlyIleLeuGlnIleuTyrAsnLeuGlyLeuThrIleLeuSerLeuTyrMetPhe 80
DB 190 CTCAGGGGATCCTCTCATCTGTATTAACCTCGCAATCACACCTTCTTGGCTATATGCTG 249
QY 81 TyrGlnLeuValThrGlyValTrpGlnGlyIleTyrAsnPhePheCysGlnGlyThrArg 100
DB 250 GTGAGACTCATCTCTCTCCAGCTGGAGAGGGTTCACAACTTGACAGTTCAGAAATCTCGAC 309

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QY 101 SerAlaGlyIleuSerAspMetIleIleAlaArgValLeuTrpTrpTyrTyrPheSerIys 120
DB 310 AGTGGAGAGAGAGGTGATGATCCGGATGACAGGTCTTGCGGTGATCTACTCTCCAA 369
QY 121 LeuIleGlnPheMetAspThrPhePhePheIleuArgIleAsnAsnHisGlnIleThr 140
DB 370 CTAGTGGAGTTCCTGGAACAGATTTCTTGTCTTACGAAAAAGAACCATCATGATCAC 429
QY 141 ValLeuHisValTyrHisHisAlaThrMetLeuAsnIleTrpTrpPheValMetAsnTrp 160
DB 430 TTCCCTCATGCTCATACACACAGCGCTCATGTTCAACATCTGCGGTGTTGTAAGTGG 489
QY 161 ValProCysGlyHisSerTyrPheGlyValAlaThrLeuAsnSerPheIleHisValMet 180
DB 490 ATACCTTGATGTCAGAGCTTCTTGGACCCACCTGAACAGCTTATCCACATTCATG 549
QY 181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTrpTrpIleIys 200
DB 550 TACTCTCTACTACGGCTGTGTGTCTCCCGTCATGCAACAAGTACCTTTGTGGAGAGAG 609
QY 201 TyrIleThrGlnGlyIleuValGlnPheValLeuThrIleIleGlnThrTrpCysGly 220
DB 610 TTACTTCACACAGGCTCAGCTGTGTCAGTGTCTACTACCAACACGACACAGCTGAGTCC 669
QY 221 ValPheTrpProCysSerPheProLeuGlyTrpLeuPhePheGlnIleGlyTyrMetIle 240
DB 670 GTGTGAAGCCCTTGTCGCTTCCCTTGGCTGCTCATCTTCCAGTCTTCTCTAATGATG 729
QY 241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIleValSer 260
DB 730 ACGCTGTCATCCCTGTTCTTAACCTTCTAATATTCAGACATACCGGAAAGCCAGTGAAG 789
QY 261 Arg-----ArgIleAspHisLeuIleValIleGlnIleValIleValIle 277
DB 790 AAAGAGCTGCAGAGAAAGAGTAAGTAATGTTTCCCAAGCCCACTTAATTGTGCT 849
QY 278 AsnGlyHisThrAsn 282
DB 850 AATGGCATGACGGAC 864

RESULT 15
US-10-156-911-5
/ Sequence 5, Application US/10156911
/ Publication No. US20030163845A1
/ GENERAL INFORMATION:
/ APPLICANT: Abbott Laboratories
/ APPLICANT: Mukerji, Pradip
/ APPLICANT: Leonard, Amanda Eun-Yeong
/ APPLICANT: Huang, Yung-Sheng
/ APPLICANT: Pereira, Suzette L.
/ TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
/ FILE REFERENCE: 6407, US, P4
/ CURRENT APPLICATION NUMBER: US/10/156,911
/ PRIOR FILING DATE: 2002-10-01
/ PRIOR APPLICATION NUMBER: US 09/903,456
/ PRIOR FILING DATE: 2001-07-11
/ PRIOR APPLICATION NUMBER: US 09/624,670
/ PRIOR FILING DATE: 2000-07-24
/ PRIOR APPLICATION NUMBER: US 09/379,095
/ PRIOR FILING DATE: 1999-08-23
/ PRIOR APPLICATION NUMBER: US 09/145,828
/ PRIOR FILING DATE: 1998-09-02
/ NUMBER OF SEQ ID NOS: 122
/ SOFTWARE: FASTSEQ for Windows Version 4.0
/ SEQ ID NO 5
/ LENGTH: 879
/ TYPE: DNA
/ ORGANISM: Mus musculus
US-10-156-911-5

Alignment Scores:
Pred. No.: 1,05e-100 Length: 879

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Score: 956.50 Matches: 169  
 Percent Similarity: 71.58% Conservative: 36  
 Best Local Similarity: 58.95% Mismatches: 78  
 Query Match: 57.93% Indels: 3  
 DB: 14 Gaps: 1

US-09-624-670-64 (1-299) x US-10-156-911-5 (1-879)

```

QY      1 MetGluHisPheAspAlaSerLeuSerThrTyrPheValAlaPheLeuGlyProAlaArg 20
DB      10 CTGAAGGCGCTTGTGATATGAAGTCAAGCTTCTTGGACAAACATGTTGGACACGAGAT 69
QY      21 ThrArgValIysGlyTyrPheLeuLeuAspAsnTyrIleProThrPheValCysSerVal 40
DB      70 TCTGGAGTTCGGGGTGGTTCCTGGAGCTTACCTTCCACCTTCATCCTCAGCATC 129
QY      41 IleTyrLeuLeuIleValTyrLeuGlyProIleTyrMetIleAsnArgGlnProPheSer 60
DB      130 ACGTACCTGCTCTCGATATGGCTGGTAACAGTACATGAAGAACAGGCGCTGCTGTCT 189
QY      61 CysArgGlyIleLeuGlnLeuTyrAsnLeuGlyLeuThrLeuLeuSerLeuTyrMetPhe 80
DB      190 CTCAGGGGCGATCCTCAGCTTGTATACCTCGCAATCACACTTCTTCTGGATATGCTG 249
QY      81 TyrGluLeuValThrGlyValTyrGluGlyIysTyrAsnPhePheCysGlnGlyThrArg 100
DB      250 GTGGAGCTCATCTCTCCAGCTGGGAGGAGTTACACTTCAGCTGTCAGATCTCGAC 309
QY      101 SerAlaGlyIleGluSerAspMetIleValArgValLeuTyrTyrTyrPheSerIys 120
DB      310 AGTCGAGAGAAAGGTGATGTCCGGGTAGCCAGAGCTTGTGGGTGACTTCTTCCAAA 369
QY      121 LeuIleGluPheMetAspThrPhePhePheIleLeuArgIleAsnAsnIleGlnIleThr 140
DB      370 CTAGTGAAGTCCCTGACACGATTTCTTGTCTTACGAAAAAGACCAATCAGATCAC 429
QY      141 ValLeuHisValTyrHisIleValThrMetLeuAsnIleTyrTyrPheValMetAsnTyr 160
DB      430 TTCTTCAATGCTATTCACCAAGCTCATGTTCAACATCTGGGTGTGTGTTGAAGTGG 489
QY      161 ValProCysGlyHisSerTyrPheGlyAlaThrLeuAsnSerPheIleHisValLeuMet 180
DB      490 ATACCTGTGGTCAAAAGCTTCTTGGACCAACCTGACAGCTTATCCACATCTCATG 549
QY      181 TyrSerTyrTyrGlyLeuSerSerIleProSerMetArgProTyrLeuTyrTyrIysIys 200
DB      550 TACTCTACTACAGGCTGTGTGTGTCCCTCCATGACACAGTACCTTGTGGAGGAAG 609
QY      201 TyrIleThrGlnGlyGlnLeuValGlnPheValLeuThrIleIleGlnThrThrCysGly 220
DB      610 TACCTCACACAGGCTCAGCTGTGTGCACTGTGTACTACACATCAGCACACGCTGAGTGCC 669
QY      221 ValPheTyrProCysSerPheProLeuGlyTyrPhePhePheGlnIleGlyTyrMetIle 240
DB      670 GTGGTGAAGCCCTGTGGCTTCCCTTGGCTGTCTCATCTTCCAGTCTTCCATATGATG 729
QY      241 SerLeuIleAlaLeuPheThrAsnPheTyrIleGlnThrTyrAsnIysIysGlyAlaSer 260
DB      730 ACGCTGTGATCCCTGTTCTTAACTTCTATTCAGACATACCGGAAAAAGCCAGTGAAG 789
QY      261 Arg-----ArgIysAspHisLeuIysGlyHisGlnAsnGlySerValAlaIleVal 277
DB      790 AAAGAGCTGCAAGAGAAAGAGTGAAGATGTTTCCCAAGCCCACTTAATGTGGCT 849
QY      278 AsnGlyHisThrAsn 282
DB      850 AATGGCATGACGGAC 864

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Search completed: April 1, 2004, 13:05:00  
 Job time : 400.655 secs





Db 61 ACAAGAGTCAAGAGATGTTCTCTGGAACAATTACATCCCTACGTTTGTGTCTGTT 120  
 Qy 121 ATTACTTACTCAATTGTATGCTGGAGCCAAATACATGAGAACCGGACCGCTTCT 180  
 Db 121 ATTACTTACTCAATTGTATGCTGGAGCCAAATACATGAGAACCGGACCGCTTCT 180  
 Qy 181 TGGCGAGGACATCCCTGAGTTGTATACCTTGAACCAACCGCTGCTCTCTACATGTC 240  
 Db 181 TGGCGAGGACATCCCTGAGTTGTATACCTTGAACCAACCGCTGCTCTCTACATGTC 240  
 Qy 241 TATGAGTTGCTGACAGGTGTGAGGAGGCAATACATTTTCTGCAAGGAGACAGC 300  
 Db 241 TATGAGTTGCTGACAGGTGTGAGGAGGCAATACATTTTCTGCAAGGAGACAGC 300  
 Qy 301 AGCGCGGAGAAATCCGATATGAAATCATCCGCTCTCTGCTGCTACTTCTCCAA 360  
 Db 301 AGCGCGGAGAAATCCGATATGAAATCATCCGCTCTCTGCTGCTACTTCTCCAA 360  
 Qy 361 CTGATGAAATTCATGACACCTTTTCTTCACTTCTGCAAGAACACACATCACC 420  
 Db 361 CTGATGAAATTCATGACACCTTTTCTTCACTTCTGCAAGAACACACATCACC 420  
 Qy 421 GTGCTCATGTCTACACACAGCTACATGCTCAACATCTGCTGTTGATGAACTGG 480  
 Db 421 GTGCTCATGTCTACACACAGCTACATGCTCAACATCTGCTGTTGATGAACTGG 480  
 Qy 481 GTTCCCTGCGGCATTCATATTTTGGTGGACATCTGACATGCTTCACTGCTCATG 540  
 Db 481 GTTCCCTGCGGCATTCATATTTTGGTGGACATCTGACATGCTTCACTGCTCATG 540  
 Qy 541 TACTGTAATGATGCTGCTCTCCATCCGCTCATGCTGCTCTGCTGCTGCTGCTG 600  
 Db 541 TACTGTAATGATGCTGCTCTCCATCCGCTCATGCTGCTGCTGCTGCTGCTGCTG 600  
 Qy 601 TACATCACTCAAGGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660  
 Db 601 TACATCACTCAAGGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660  
 Qy 661 GTCTTCTGCGCATGCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720  
 Db 661 GTCTTCTGCGCATGCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720  
 Qy 721 TCCCTGATGCTCTCTTCAAACTTCTTCACTTCACTTCACTTCACTTCACTTCA 780  
 Db 721 TCCCTGATGCTCTCTTCAAACTTCTTCACTTCACTTCACTTCACTTCACTTCA 780  
 Qy 781 CGAGGAAAGACCACTGGAAGGCGCACAGAGGAGGTCTGTGCGCGCTCAACGACAC 840  
 Db 781 CGAGGAAAGACCACTGGAAGGCGCACAGAGGAGGTCTGTGCGCGCTCAACGACAC 840  
 Qy 841 ACCAAGAGCTTCCCTTCTGGAACAGCGTGAAGCCAGAGAGCGAAAGGATTGA 900  
 Db 841 ACCAAGAGCTTCCCTTCTGGAACAGCGTGAAGCCAGAGAGCGAAAGGATTGA 900

RESULT 2  
 US-10-156-911-6  
 ; Sequence 6, Application US/10156911  
 ; Publication No. US20030163845A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradipt  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407, US, P4  
 ; CURRENT APPLICATION NUMBER: US/10/156,911  
 ; PRIOR FILING DATE: 2002-10-01  
 ; PRIOR APPLICATION NUMBER: US 09/903,456  
 ; PRIOR FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24

Qy 1 ATGGAACATTTGATGCTCACTCACTGATCTTCAAGGCTTCTGCGGCCCGGAGAT 60  
 Db 1 ATGGAACATTTGATGCTCACTCACTGATCTTCAAGGCTTCTGCGGCCCGGAGAT 60  
 Qy 61 ACAAGAGTCAAGAGATGTTCTCTGGAACAATTACATCCCTACGTTTGTGTCTGTT 120  
 Db 61 ACAAGAGTCAAGAGATGTTCTCTGGAACAATTACATCCCTACGTTTGTGTCTGTT 120  
 Qy 121 ATTACTTACTCAATTGTATGCTGGAGCCAAATACATGAGAACCGGACCGCTTCT 180  
 Db 121 ATTACTTACTCAATTGTATGCTGGAGCCAAATACATGAGAACCGGACCGCTTCT 180  
 Qy 181 TGGCGAGGACATCCCTGAGTTGTATACCTTGAACCAACCGCTGCTCTCTACATGTC 240  
 Db 181 TGGCGAGGACATCCCTGAGTTGTATACCTTGAACCAACCGCTGCTCTCTACATGTC 240  
 Qy 241 TATGAGTTGCTGACAGGTGTGAGGAGGCAATACATTTTCTGCAAGGAGACAGC 300  
 Db 241 TATGAGTTGCTGACAGGTGTGAGGAGGCAATACATTTTCTGCAAGGAGACAGC 300  
 Qy 301 AGCGCGGAGAAATCCGATATGAAATCATCCGCTCTCTGCTGCTACTTCTCCAA 360  
 Db 301 AGCGCGGAGAAATCCGATATGAAATCATCCGCTCTCTGCTGCTACTTCTCCAA 360  
 Qy 361 CTGATGAAATTCATGACACCTTTTCTTCACTTCTGCAAGAACACACATCACC 420  
 Db 361 CTGATGAAATTCATGACACCTTTTCTTCACTTCTGCAAGAACACACATCACC 420  
 Qy 421 GTGCTCATGTCTACACACAGCTACATGCTCAACATCTGCTGTTGATGAACTGG 480  
 Db 421 GTGCTCATGTCTACACACAGCTACATGCTCAACATCTGCTGTTGATGAACTGG 480  
 Qy 481 GTTCCCTGCGGCATTCATATTTTGGTGGACATCTGACATGCTTCACTGCTCATG 540  
 Db 481 GTTCCCTGCGGCATTCATATTTTGGTGGACATCTGACATGCTTCACTGCTCATG 540  
 Qy 541 TACTGTAATGATGCTGCTCTCCATCCGCTCATGCTGCTGCTGCTGCTGCTGCTG 600  
 Db 541 TACTGTAATGATGCTGCTCTCCATCCGCTCATGCTGCTGCTGCTGCTGCTGCTG 600  
 Qy 601 TACATCACTCAAGGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660  
 Db 601 TACATCACTCAAGGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660  
 Qy 661 GTCTTCTGCGCATGCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720  
 Db 661 GTCTTCTGCGCATGCTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720  
 Qy 721 TCCCTGATGCTCTCTTCAAACTTCTTCACTTCACTTCACTTCACTTCACTTCA 780  
 Db 721 TCCCTGATGCTCTCTTCAAACTTCTTCACTTCACTTCACTTCACTTCACTTCA 780  
 Qy 781 CGAGGAAAGACCACTGGAAGGCGCACAGAGGAGGTCTGTGCGCGCTCAACGACAC 840  
 Db 781 CGAGGAAAGACCACTGGAAGGCGCACAGAGGAGGTCTGTGCGCGCTCAACGACAC 840  
 Qy 841 ACCAAGAGCTTCCCTTCTGGAACAGCGTGAAGCCAGAGAGCGAAAGGATTGA 900  
 Db 841 ACCAAGAGCTTCCCTTCTGGAACAGCGTGAAGCCAGAGAGCGAAAGGATTGA 900

PRIOR APPLICATION NUMBER: US 09/379,095  
 PRIOR FILING DATE: 1998-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 122  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO 6  
 LENGTH: 900  
 TYPE: DNA  
 ORGANISM: Mus musculus  
 US-10-156-911-6

Query Match 100.0%; Score 900; DB 14; Length 900;  
 Best Local Similarity 100.0%; Pred. No. 2,5e-287;  
 Matches 900; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 841 ACCAAGCTTCCCTTCCCTGGAAAACAGCTGAAGCCAGAGGACGGAAGATTGA 900

## RESULT 3

US-09-903-456-3

Sequence 3, Application US/09903456

Patent No. US20020138874A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradiip

APPLICANT: Leonard, Amanda Eun-Yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407.US.P3

CURRENT APPLICATION NUMBER: US/09/903.456

PRIOR FILING DATE: 2001-07-11

PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 116

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3

LENGTH: 914

TYPE: DNA

ORGANISM: Homo sapiens

Query Match 79.6%; Score 716; DB 9; Length 914;

Best Local Similarity 87.2%; Pred. No. 2.7e-226; Mismatches 115; Indels 0; Gaps 0;

Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

1 ATGGAACATTTGATGAGTCTGAGTCACTGATCTATTTCAAGGCTTCTGAGCCCGGAGAT 60  
 1 ATGGAACATTTGATGAGTCACTGATCTATTTCAAGGCTTCTGAGCCCGGAGAT 60  
 61 ACAAGAGTCAAGAGATGCTTCTCTGAGCAATTAATCACTCTGAGTTTGTCTGTCT 120  
 61 ACTAGAGTAAAGAGATGCTTCTCTGAGCAATTAATCACTCTGAGTTTGTCTGTCT 120  
 121 ATTACTTACTGATGATGCTGAGCAAAATATCATGAGAGCGAGCGTCTCT 180  
 121 ATATATTACTGATGATGCTGAGCAAAATATCATGAGAGCGAGCGTCTCT 180  
 181 TGCCGAGGATCTGAGTGTATGATGATGATGATGATGATGATGATGATGATGAT 240  
 181 TGCCGAGGATCTGAGTGTATGATGATGATGATGATGATGATGATGATGATGAT 240  
 241 TATAGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 300  
 241 TATAGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 300  
 301 AGCCGAGGATCTGAGTGTATGATGATGATGATGATGATGATGATGATGATGAT 360  
 301 AGCCGAGGATCTGAGTGTATGATGATGATGATGATGATGATGATGATGATGAT 360  
 361 CTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420  
 361 CTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420  
 421 GTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 480  
 421 GTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 480  
 481 GTTCCCTGAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 540  
 481 GTTCCCTGAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 540  
 541 TACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 600

Db 541 TACTTACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 600  
 601 TACTTACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 660  
 601 TACTTACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 660  
 661 GTTCTTGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 720  
 661 GTTCTTGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 720  
 721 TCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 780  
 721 TCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 780  
 781 CGAGGAG 840  
 781 CGAGGAG 840  
 841 ACCAAGCTTCCCTTCCCTGGAAAACAGCTGAAGCCAGAGAGAGAGAGAGATTGA 900  
 841 ACCAAGCTTCCCTTCCCTGGAAAACAGCTGAAGCCAGAGAGAGAGAGAGATTGA 900

## RESULT 4

US-09-769-863-21

Sequence 21, Application US/09769863

Publication No. US20030157144A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradiip

APPLICANT: Huang, Yung-Sheng

APPLICANT: Das, Tapas

APPLICANT: Thurmond, Jennifer

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

FILE REFERENCE: 6763.US.O1

CURRENT APPLICATION NUMBER: US/09/769,863

PRIOR FILING DATE: 2001-01-25

NUMBER OF SEQ ID NOS: 32

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 21

LENGTH: 914

TYPE: DNA

ORGANISM: Homo sapiens

US-09-769-863-21

Query Match 79.6%; Score 716; DB 10; Length 914;

Best Local Similarity 87.2%; Pred. No. 2.7e-226; Mismatches 115; Indels 0; Gaps 0;

Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

1 ATGGAACATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 60  
 1 ATGGAACATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 60  
 61 ACAAGAGTCAAGAGATGCTTCTCTGAGCAATTAATCACTCTGAGTTTGTCTGTCT 120  
 61 ACTAGAGTAAAGAGATGCTTCTCTGAGCAATTAATCACTCTGAGTTTGTCTGTCT 120  
 121 ATTACTTACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 180  
 121 ATATATTACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 180  
 181 TGCCGAGGATCTGAGTGTATGATGATGATGATGATGATGATGATGATGATGATGAT 240  
 181 TGCCGAGGATCTGAGTGTATGATGATGATGATGATGATGATGATGATGATGATGAT 240  
 241 TATAGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 300  
 241 TATAGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 300  
 301 AGCCGAGGATCTGAGTGTATGATGATGATGATGATGATGATGATGATGATGATGAT 360

Db 301 ACCGAGAGAAATACAGATATGAAGATTATCCGTCCTCTGAGTGTAATCTTCTCCAAA 360  
 QY CTCATCGAATTCATGGACACCTTTTCTTCTCATCTTCCGAAAGAACCAACAGATCAC 420  
 Db 361 CTCATGAAATTTATGACACTTTCTTCTTCTTCTGCGGAGAACACACACATCAACG 420  
 QY 421 GTGCTCATGTCTACACACAGCTACATGCTCAACATCTGATGTTGTGATGAATGG 480  
 Db 421 GTCTGACAGTACACACATGCTGATGTAACATCTGATGTTGTGATGAATGG 480  
 QY 481 GTTCCCTGGGCAATTCATTTTGTGACACATCAACAGCTTCAATCAATGCTCATG 540  
 Db 481 GTTCCCTGGGCAATTCATTTTGTGACACATCAACAGCTTCAATCAATGCTCATG 540  
 QY 541 TACTCGTACTATGTCTGCTCTCAATCCGTCATCCGTCATCCCTTCTGATGAAAG 600  
 Db 541 TACTCTTACTATGTGTTGTGCTGCTCAATCCGTCATCCGTCATCCCTTCTGATGAAAG 600  
 QY 601 TACATCACTCAAGGAGAGCTGCTCAATTTGTGCTCAATCAATCAATCAAGAGCTGCGG 660  
 Db 601 TACATCACTCAAGGAGAGCTGCTCAATTTGTGCTCAATCAATCAATCAAGAGCTGCGG 660  
 QY 661 GTTCTGCGCAATGCTCTCCCTCTGCGGCTGCTCTTCCAGATTGATGATGAT 720  
 Db 661 GTTCTGCGCGCTGCAATCTCCCTCTGCTGTTGTGTTGTTTCCAGATTGATGATGAT 720  
 QY 721 TCCCTGATTGCTCTCTTCAAACTTCAATCAATCAATCAATCAAAAGAGGAGCTCT 780  
 Db 721 TCCCTGATTGCTCTCTTCAAACTTCAATCAATCAATCAATCAAAAGAGGAGCTCT 780  
 QY 781 CGAGAGAAAGACCACTGAAGGCGCAAGAGCGGCTGTGCGCGCGCTCAAGAGAC 840  
 Db 781 CGAGAGAAAGACCACTGAAGGCGCAAGAGCGGCTGTGCGCGCGCTCAAGAGAC 840  
 QY 841 ACCAAGAGCTTCCCTCTCCCTGAAAAACAGCTGAAGCCGAGAAAGAGAGATGA 900  
 Db 841 ACCAAGAGCTTTCACCCCTGAAAAACAGATGGAAGCAAGAGAGCTGCGAAGATGA 900

RESULT 5  
 US-10-156-911-3  
 ; Sequence 3, Application US/10156911  
 ; Publication No. US20030163845A1  
 GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407 US P4  
 ; CURRENT APPLICATION NUMBER: US/10/156,911  
 ; CURRENT FILING DATE: 2002-10-01  
 ; PRIOR APPLICATION NUMBER: US 09/503,456  
 ; PRIOR FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 122  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 3  
 ; LENGTH: 914  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 US-10-156-911-3

Query Match 79.6%; Score 716; DB 14; Length 914;  
 Best Local Similarity 87.2%; Pred. No. 2,7e-226;  
 Matches 789; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 1 ATGGAACATTTGATGCTCACTACAGTACCTATTTCAAGGCTTCTGAGCCGCCAGAT 60  
 Db 1 ATGGAACATTTGATGATGATCACTTAGTACCTATTTCAAGGCAATGTGAGCCCTCGAGAT 60  
 QY 61 ACAAAGTCAAGAGATGCTTCTCTGCAATTTACATCCCTACGTTTGTCTGTCTGT 120  
 Db 61 ACTAAGTCAAGAGATGCTTCTCTGCAATTTATATACCATTTACATTTACCTCTGTCT 120  
 QY 121 ATTTACTACTCATTTGATGCTGAGCAAAATACATGAAGAACCGGACGCTTCTCT 180  
 Db 121 ATATATTTACTATTTGATGCTGAGCAAAATACATGAAGATTAAGGCAATTTCTCT 180  
 QY 181 TGCCGAGCATCTGCACTGTATTAACCTTGAACCTCACTCTGCTCTCTCTCAATGTT 240  
 Db 181 TGCCGAGCATCTGCACTGTATTAACCTTGAACCTCACTCTGCTCTCTCTCTATGTT 240  
 QY 241 TATGATGTTGATGACAGGTGTGAGGAGGCAAAATACAACTTTTCTGCGAGGAAACG 300  
 Db 241 TGTGATTTAGTACAGAGATATGAGAAAGCAATTAATTTCTTCTCTGCGAGGCAACG 300  
 QY 301 ACGCGGAGAAATCGATATGAAATCATCGCGCTCTCTGATGTAATTAATTTCTCAAA 360  
 Db 301 ACCGAGAGAAATCGATATGAAATCATCGCTCTCTGATGTAATTTCTCTCAAA 360  
 QY 361 CTCATCAATTCATGAGACCTTTTCTTCTCATCTTCCGAAAGAACCAACAGATCAC 420  
 Db 361 CTCATCAATTCATGAGACCTTTTCTTCTCATCTTCCGAAAGAACCAACAGATCAC 420  
 QY 421 GTGCTCAATGCTCAACACAGTACATGCTCAACATCTGAGTTGTGATGAATG 480  
 Db 421 GTGCTCAATGCTCAACACAGTACATGCTCAACATCTGAGTTGTGATGAATG 480  
 QY 481 GTTCCCTGGGCAATTCATTTTGTGCTCAATCAACAGCTTCAATCAATGCTCATG 540  
 Db 481 GTTCCCTGGGCAATTCATTTTGTGCTCAATCAACAGCTTCAATCAATGCTCATG 540  
 QY 541 TACTGTAATTTGATGCTCTCTCATCCGTCATGCTGCTCAATCCCTGATGAAAG 600  
 Db 541 TACTGTAATTTGATGCTCTCTCATCCGTCATGCTGCTCAATCCCTGATGAAAG 600  
 QY 541 TACTCTTACTATGTTGTGCTCAATCCCTTCCATGCTCAATCCCTTGTGATGAATG 660  
 Db 541 TACTCTTACTATGTTGTGCTCAATCCCTTCCATGCTCAATCCCTTGTGATGAATG 660  
 QY 601 TACATCACTCAAGGAGAGCTGCTCAATTTGTGCTCAATCAATCAAGAGCTGCGG 660  
 Db 601 TACATCACTCAAGGAGAGCTGCTCAATTTGTGCTCAATCAATCAAGAGAGCTGCGG 660  
 QY 661 GTTCTGCGCAATGCTCTCCCTCTGCGGCTGCTCTTCCAGATTGATGATGAT 720  
 Db 661 GTTCTGCGCGCTGCAATCTCCCTCTGCTGTTGTGTTTCCAGATTGATGATGAT 720  
 QY 721 TCCCTGATTGCTCTCTTCAAACTTCAATCAATCAATCAATCAAAAGAGGAGCTCT 780  
 Db 721 TCCCTGATTGCTCTCTTCAAACTTCAATCAATCAATCAATCAAAAGAGGAGCTCT 780  
 QY 781 CGAGAGAAAGACCACTGAAGGCGCAAGAGCGGCTGTGCGCGCGCTCAAGAGAC 840  
 Db 781 CGAGAGAAAGACCACTGAAGGCGCAAGAGCGGCTGTGCGCGCGCTCAAGAGAC 840  
 QY 841 ACCAAGAGCTTCCCTCTCCCTGAAAAACAGCTGAAGCCGAGAAAGAGATGA 900  
 Db 841 ACCAAGAGCTTTCACCCCTGAAAAACAGATGGAAGCAAGAGAGCTGCGAAGATGA 900

RESULT 6  
 US-10-054-534B-21  
 ; Sequence 21, Application US/10054534B  
 ; Publication No. US20030167525A1  
 GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Das, Tapas  
 ; APPLICANT: Thurmond, Jennifer M.  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

FILE REFERENCE: 6763.US.P1  
 CURRENT APPLICATION NUMBER: US/10/054,534B  
 CURRENT FILING DATE: 2002-01-22  
 PRIOR APPLICATION NUMBER: US 09/769,863  
 PRIOR FILING DATE: 2001-01-25  
 NUMBER OF SEQ ID NOS: 55  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO 21  
 LENGTH: 914  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-10-054-534B-21

Query Match 79.6%; Score 716; DB 14; Length 914;  
 Best Local Similarity 87.2%; Pred. No. 2,7e-226;  
 Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 1 ATGGAACATTGCATGCGTCACTCAGTACCTATTTCAGAGCCCTTCTGGGCCCCGAGAT 60  
 DB 1 ATGGAACATTGCATGCGTCACTCAGTACCTATTTCAGAGCCCTTCTGGGCCCCGAGAT 60  
 QY 61 ACAAGAGTCAAGAGTGTCTCTCGACCAATTTCATCCCTAGCTTGTCTGTCT 120  
 DB 61 ACTAGAGTAAAGAGTGTCTCTCGACCAATTTCATCCCTAGCTTGTCTGTCT 120  
 QY 121 ATTACTTACTTCTATGTGCTGGACCAAAATACATGAGAACCGGACGCTTCT 180  
 DB 121 ATATATTACTTATGTGATGCTGGACCAAAATACATGAGAACCGGACGCTTCT 180  
 QY 181 TGGCGAGGATCCTCGAGTGTATTAACCTTGGATCAACCTCTCTCTCTACATGTC 240  
 DB 181 TGGCGAGGATCCTCGAGTGTATTAACCTTGGATCAACCTCTCTCTCTACATGTC 240  
 QY 241 TATGAGTGTGACAGTGTGTGGAGGCAAAATACAACTTTTCTGCGAGGAAACAGC 300  
 DB 241 TGTGAGTGTATTAAGAGATGTGGAGGCAAAATACAACTTTTCTGCGAGGAAACAGC 300  
 QY 301 AGCGGAGAGATCCGATATGAAGATCCGCTCTGTGTGTAATCTTCTCMAA 360  
 DB 301 ACCGAGAGAGATCCGATATGAAGATTCGCTGTGTGTAATCTTCTCMAA 360  
 QY 361 CTGATGGAATTCATGAGACCTTTCTTCTTCTGCAAGCAAAACCAACCAAGATGCC 420  
 DB 361 CTGATGGAATTCATGAGACCTTTCTTCTTCTGCAAGCAAAACCAACCAAGATGCC 420  
 QY 421 GTGCTCCATGTCTACCAACGAGTACCATGTCAACATCTGTGTGTGTGTAAGTGG 480  
 DB 421 GTGCTCCATGTCTACCAACGAGTACCATGTCAACATCTGTGTGTGTGTAAGTGG 480  
 QY 481 GTTCCCTGGGCGCATTCATTTTGTGTGGACATCAACAGTTTCAATCAGTCTCTATG 540  
 DB 481 GTTCCCTGGGCGCATTCATTTTGTGTGGACATCAACAGTTTCAATCAGTCTCTATG 540  
 QY 541 TACTGTAATGATGTCTGCTCCATCCGTCATCCGTCATCCCTTACCTCTGTGTGAAAAG 600  
 DB 541 TACTGTAATGATGT 600  
 QY 601 TACATCACTAAGGGGAGCTGTCTCAAGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660  
 DB 601 TACATCACTAAGGGGAGCTGTCTCAAGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660  
 QY 661 GTCTTGTGGCATGCT 720  
 DB 661 GTCTTGTGGCATGCT 720  
 QY 721 TCCCTGATGCT 780  
 DB 721 TCCCTGATGCT 780  
 QY 781 CGAGAGAAAGCACTGAAAGGGGCAACGAGAGGGGTCTGTGGCGCGCTCAAGGAGAC 840  
 DB 781 CGAGAGAAAGCACTGAAAGGGGCAACGAGAGGGGTCTGTGGCGCGCTCAAGGAGAC 840

QY 841 ACCAAGCTTCCCTCTGGAAGAGCCGAGAGCCAGAGCAAGAGATTTGA 900  
 DB 841 ACCAAGCTTTCACCCCTGGAAAACATGTGAAGCAAGAGAGCTGGAGAGATTGA 900

RESULT 7  
 US-10-408-736-3  
 Sequence 3, Application US/10408736  
 Publication No. US20030177508A1  
 GENERAL INFORMATION:  
 APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Das, Tapas  
 APPLICANT: Huang, Yung-Sheng  
 APPLICANT: Parker-Barnes, Jennifer M.  
 APPLICANT: Leonard, Amanda Eun-yeong  
 APPLICANT: Thurmond, Jennifer M.  
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 FILE REFERENCE: 6407.US.P1  
 CURRENT APPLICATION NUMBER: US/10/408,736  
 CURRENT FILING DATE: 2003-04-04  
 PRIOR APPLICATION NUMBER: US/09/379,095A  
 PRIOR FILING DATE: 1998-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 81  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO 3  
 LENGTH: 914  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-10-408-736-3

Query Match 79.6%; Score 716; DB 14; Length 914;  
 Best Local Similarity 87.2%; Pred. No. 2,7e-226;  
 Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 1 ATGGAACATTGCATGCGTCACTCAGTACCTATTTCAGAGCCCTTCTGGGCCCCGAGAT 60  
 DB 1 ATGGAACATTGCATGCGTCACTCAGTACCTATTTCAGAGCCCTTCTGGGCCCCGAGAT 60  
 QY 61 ACAAGAGTCAAGAGTGTCTCTCGACCAATTTCATCCCTAGCTTGTCTGTCT 120  
 DB 61 ACTAGAGTAAAGAGTGTCTCTCGACCAATTTCATCCCTAGCTTGTCTGTCT 120  
 QY 121 ATTACTTACTTCTATGTGCTGGACCAAAATACATGAGAACCGGACGCTTCT 180  
 DB 121 ATATATTACTTATGTGATGCTGGACCAAAATACATGAGAACCGGACGCTTCT 180  
 QY 181 TGGCGAGGATCCTCGAGTGTATTAACCTTGGATCAACCTCTCTCTCTACATGTC 240  
 DB 181 TGGCGAGGATCCTCGAGTGTATTAACCTTGGATCAACCTCTCTCTCTACATGTC 240  
 QY 241 TATGAGTGTGACAGTGTGTGGAGGCAAAATACAACTTTTCTGCGAGGAAACAGC 300  
 DB 241 TGTGAGTGTATTAAGAGATGTGGAGGCAAAATACAACTTTTCTGCGAGGAAACAGC 300  
 QY 301 AGCGGAGAGATCCGATATGAAGATCCGCTCTGTGTGTAATCTTCTCMAA 360  
 DB 301 ACCGAGAGAGATCCGATATGAAGATTCGCTGTGTGTAATCTTCTCMAA 360  
 QY 361 CTGATGGAATTCATGAGACCTTTCTTCTTCTGCAAGCAAAACCAACCAAGATGCC 420  
 DB 361 CTGATGGAATTCATGAGACCTTTCTTCTTCTGCAAGCAAAACCAACCAAGATGCC 420  
 QY 421 GTGCTCCATGTCTACCAACGAGTACCATGTCAACATCTGTGTGTGTGTAAGTGG 480  
 DB 421 GTGCTCCATGTCTACCAACGAGTACCATGTCAACATCTGTGTGTGTGTAAGTGG 480  
 QY 481 GTTCCCTGGGCGCATTCATTTTGTGTGGACATCAACAGTTTCAATCAGTCTCTATG 540  
 DB 481 GTTCCCTGGGCGCATTCATTTTGTGTGGACATCAACAGTTTCAATCAGTCTCTATG 540



Best Local Similarity 87.3%; Pred. No. 8,3e-189;  
Matches 660; Conservative 1; Mismatches 95; Indels 0; Gaps 0;

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QY 1 ATGGAACATTTGACAGGCTCACTAGTACCTATTTCAGGCTCTCCGAGCCCGAGAT 60
Db 106 ATGGAACATTTGATGATCACTAGTACCTATTTCAGGCTCTCCGAGAT 165
QY 61 ACAGAGTCAGAGATGGTTCCTCCGAGCAATTAACCTCCCTGCTGCTGCTGCT 120
Db 166 ACAGAGTCAGAGATGGTTCCTCCGAGCAATTAACCTCCCTGCTGCTGCTGCT 225
QY 121 ATTACTTACTCATTTGATAGCTGCGGACCAAAATACAGAGACCGGACCGCTCTCT 180
Db 226 ATATATTACTAATTTGATAGCTGCGGACCAAAATACAGAGATTAAGACCATCTCTCT 285
QY 181 TCGGAGGACATCCCTGCACTGTTATTAACCTGAGCTACCTGCTGCTCTCTCAATGTC 240
Db 286 TCGGAGGACATTTTATAGTGTGTATTAACCTGAGCTACCTGCTGCTCTCTCAATGTC 345
QY 241 TATGAGTTGATGACAGGCTGTGTGGGAGGCAATATACACTTTTCTGCCAGGAGACCG 300
Db 346 TGTGAGTTAGTAAACAGAGATATGGGAGGCAATATACACTTTTCTGCCAGGAGACCG 405
QY 301 AGCGGGGAGAAATCCGATATGAATCATCCGCGCTCTCTGCTGCTGCTCTCTCTCTCT 360
Db 406 ACCGAGGAGAAATCATGATATGAATATACCGTGTCTCTGCTGCTGCTCTCTCTCTCT 465
QY 361 CTCATCGAATTCATGAGACACTTTTCTCTCATCCCTGCGAAGAACACACAGATCACC 420
Db 466 CTCATAGATTTATGAGACACTTTTCTCTCATCCCTGCGAAGAACACACAGATCACC 525
QY 421 GTGCTCATGTCTACCAACAGCTACCAATGCTCAACATCGTGTGTGTGTGTGTGTGT 480
Db 526 GTGCTCATGTCTACCAACAGCTACCAATGCTCAACATCGTGTGTGTGTGTGTGTGT 585
QY 481 GTTCCCTGCGGCACTTCAATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
Db 586 GTTCCCTGCGGCACTTCAATTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 645
QY 541 TACTGCTACTATGCTGTCTCTCCATCCCGCTCATCGCTCTCTCTCTCTCTCTCTCTCT 600
Db 646 TACTGCTACTATGCTGTCTCTCCATCCCGCTCATCGCTCTCTCTCTCTCTCTCTCTCT 705
QY 601 TACATCACTCAAGGGGAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
Db 706 TACATCACTCAAGGGGAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 765
QY 661 GTCTTCTGCGCATGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 720
Db 766 GTCTTCTGCGCATGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 825
QY 721 TCCCTGATGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 756
Db 826 TCCCTGATGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 861

```

RESULT 10  
US-09-764-868-353  
; Sequence 353, Application US/09764868  
; Patent No. US2002016871A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosen et al.  
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
; FILE REFERENCE: PT232  
; CURRENT APPLICATION NUMBER: US/09/764,868  
; CURRENT FILING DATE: 2001-01-17  
; Prior application data removed - refer to PALM or file wrapper  
; NUMBER OF SEQ ID NOS: 1510  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 353  
; LENGTH: 871  
; TYPE: DNA  
; ORGANISM: Homo sapiens

US-09-764-868-353

Query Match 57.7%; Score 519.4; DR 9; Length 871;  
Best Local Similarity 88.8%; Pred. No. 4,2e-161;  
Matches 562; Conservative 0; Mismatches 71; Indels 0; Gaps 0;

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QY 268 GGCAGATATCAATTTTCTCTCCAGGAGACAGCAGCGCGGAGATCCATATGAAGATC 327
Db 1 GGCAGATATCAATTTTCTCTCTCCAGGAGACAGCAGCGCGGAGATCCATATGAAGATC 60
QY 328 ATCCGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 387
Db 61 ATCCGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 120
QY 388 TTCACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 447
Db 121 TTCACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 180
QY 448 ATGCTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 507
Db 181 ATGCTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 240
QY 508 GCGACACTCAAGCTTCAATCCATGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 567
Db 241 GCGACACTCAATGCTTCAATCCATGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 300
QY 241 GCGACACTCAATGCTTCAATCCATGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 300
Db 301 CTCTTCATGCGTCTCATACCTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 360
QY 628 TTTGTGCTGACATATCCAGAGACCTGCGGGGCTCTCTCTGCGCATGCTCTCTCTCT 687
Db 361 TTTGTGCTGACATATCCAGAGACCTGCGGGGCTCTCTCTGCGCATGCTCTCTCTCT 420
QY 688 GGTGTGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 747
Db 421 GGTGTGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 480
QY 748 TACATTCAGACTTACCAAGAGAGGCGCTCTCTGAGAGAGAGAGAGAGAGAGAGAG 807
Db 481 TACATTCAGACTTACCAAGAGAGGCGCTCTCTGAGAGAGAGAGAGAGAGAGAGAG 540
QY 808 CAGAGCGGTCTGTGCGCGCGCTCAACGAGACAGCAAGAGAGAGAGAGAGAGAGAGAG 867
Db 541 CAGAGCGGTCTGTGCGCGCGCTCAACGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 600
QY 868 AGCGTGAAGCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 900
Db 601 AATGTGAAGCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 963

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RESULT 11  
US-09-764-868-352  
; Sequence 352, Application US/09764868  
; Patent No. US2002016871A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosen et al.  
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
; FILE REFERENCE: PT232  
; CURRENT APPLICATION NUMBER: US/09/764,868  
; CURRENT FILING DATE: 2001-01-17  
; Prior application data removed - refer to PALM or file wrapper  
; NUMBER OF SEQ ID NOS: 1510  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 352  
; LENGTH: 748  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; NAME/KEY: SITE  
; LOCATION: (702)  
; OTHER INFORMATION: n equals a,t,g, or c  
; NAME/KEY: SITE

LOCATION: (721)  
OTHER INFORMATION: n equals a,t,g, or c  
US-09-764-868-352

Query Match 51.7%; Score 465.6; DB 5; Length 748;  
Best Local Similarity 86.4%; Pred. No. 2,7e-143;  
Matches 513; Conservative 1; Mismatches 80; Indels 0; Gaps 0;

QY 1 ATGAACATTGGATGCGTCACTGACCTGATCTATTTCAAGGCGCTTCCTGGGCGCCCGAGAT 60  
DB 107 ATGAACATTGGATGCGTCACTGACCTGATCTATTTCAAGGCGCTTCCTGGGCGCCCGAGAT 166  
QY 61 ACAAGATCAAGAGATGTTCTCTCGACAAATTAATCCCTACGCTTGTCTGTTCT 120  
DB 167 ACTAGATAAAGATGTTCTCTCGACAAATTAATCCCACTTATCTGCTGCTC 226  
QY 121 ATTACTTACTCTTGTATGCGTGGGACCAATATCAAGAAACCGGACCGCTTCT 180  
DB 227 ATATATTACTTATTTATGCGTGGGACCAATATCAAGAAATTAACGCCATTTCT 286  
QY 181 TGCGAGGACATCCGCGATGTTATTAACCTTGACCTACCCCTGCTCTCTGATGTT 240  
DB 287 TGCGGGGGGATTTAGTGTGATTAACCTTGACCTACCTGCTCTCTGATGTT 346  
QY 241 TATGATGTTGTGACAGGTGTGTGGAGGCAATATCACTTTTCTGCCAGGAAACAGC 300  
DB 347 TGAGATGATTAACAGAGATATGGGAGGCAATATCACTTTCTGTCAAGGCAACAGC 406  
QY 301 AGGCGGGAGATCCGATATGAAGATCATCCGCGCTCTGTTGTTACTACTTCTCCAA 360  
DB 407 ACCGCAAGAGATCAAGATATGAAGATTAATCCGCTGCTGTGTGTACTACTTCTCCAA 466  
QY 361 CTGATCGAATTCATGACACCTTTTCTTCTTCTTCTGCGAAGAACCAACCAAGTACC 420  
DB 467 CTGATGAATTTATGACACTTCTTCTTCTTCTTCTGCGAAGAACCAACCAAGTACC 526  
QY 421 GTGCTCATGTACACCAACGCTACACGCTCAACATCGTGTGTGTGTGTATGAATG 480  
DB 527 GTGCTCATGTACACCAACGCTGTGAGTGTGAATGTGTGTGTGTGTGTGAATG 586  
QY 481 GTTCCCTGCGGCATTCATATTTTGTGTGAGACCTCAACAGCTTCATCCATGCTCT 540  
DB 587 GTTCCCTGCGGCATTCATATTTTGTGTGAGACCTCAACAGCTTCATCCATGCTCT 646  
QY 541 TACTCTACTATGCTGTCTGCTTCCATCCGCTCAGTGGCTTCTTCTGTTG 594  
DB 647 TACTCTACTATGCTGTGTCTGCTCAGTGGCTTCTTCCATGCTTCTGTTG 700

RESULT 12  
US-09-903-456-5

Sequence 5, Application US/09903456  
Patent No. US20020138874A1  
GENERAL INFORMATION:  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradip  
APPLICANT: Leonard, Amanda Eun-Young  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Pereira, Suzette J.  
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
FILE REFERENCE: 6407.US.E3  
CURRENT APPLICATION NUMBER: US/09/903,456  
CURRENT FILING DATE: 2001-07-11  
PRIOR APPLICATION NUMBER: US 09/624,670  
PRIOR FILING DATE: 2000-07-24  
PRIOR APPLICATION NUMBER: US 09/379,095  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: US 09/145,828  
PRIOR FILING DATE: 1998-09-02  
NUMBER OF SEQ ID NOS: 116  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 5  
LENGTH: 879

TYPE: DNA  
ORGANISM: Mus musculus  
US-09-903-456-5

Query Match 38.3%; Score 345; DB 9; Length 879;  
Best Local Similarity 65.8%; Pred. No. 3e-103;  
Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

QY 10 TTGATGAGTCACTAGTACTATTTCAAGGCGCTTCCTGGGCGCCCGAGATCAAGATC 69  
DB 19 TTGATTAATGAAGTCAATGCTTCTTGTGACAAATGTTGGACCAAGATTCGAGTT 78  
QY 70 AAAGATGTTCTCTCTGGAATTAATCCCTACGCTTGTCTGTTCTGTTATTTACTTA 129  
DB 79 CCGGAGTGTCTCTGGAATTAATCCCTACGCTTGTCTGTTCTGTTATTTACTTA 138  
QY 130 CTCATTTGATGCTGCGGCAAAATTAATGAAGAACCGGCGCTTCTGTCGAGGC 189  
DB 139 CTCGATTAATGCTGCGGCAAAATTAATGAAGAACCGGCGCTTCTGTCGAGGC 198  
QY 190 ATCTGCAAGTTGATTAATGCTGCACTCACTGCTGCTCTCTGATGTTCTATGATTG 249  
DB 199 ATCTGCACTGTTATTAATGCTGCACTCACTGCTGCTCTCTGATGTTCTATGATTG 258  
QY 250 GTGACAGTGTGTGGAGGCAATATCACTTTTCTGCCAGGAAACAGGAGGCGGGA 309  
DB 259 ATCTGCTCAGTGTGGAGGCAATATCACTTTTCTGCCAGGAAACAGGAGGCGGGA 318  
QY 310 GAATCCGATATGAATCATCCGCGCTCTGTTGTTACTACTTCTCCAACTCATGAA 369  
DB 319 GAAGTGAATGCTGCGGTTGCAAGTCTTGTGTGTATGTTCTTCCAACTCATGAA 378  
QY 370 TTGATGACACTTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 429  
DB 379 TTCTGGAACCAATTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 438  
QY 430 GTCTCAACCAAGTACCATGCTCAACATCTGTTGTTGTTGTTGTTGTTGTTGTTGTT 489  
DB 439 GTCTCAACCAAGTACCATGCTCAACATCTGTTGTTGTTGTTGTTGTTGTTGTTGTT 498  
QY 490 GGCATTCATATTTTGTGCACTCAACAGCTTCATCATGCTTCTGATGTTACTGTTAC 549  
DB 499 GGCATTCATATTTTGTGCACTCAACAGCTTCATCATGCTTCTGATGTTACTGTTAC 558  
QY 550 TATGCTGTCTCTCATCCGCTCATGCTGCTTCTTCTTCTTCTTCTTCTTCTTCT 609  
DB 559 TATGCTGTCTCTCATCCGCTCATGCTGCTTCTTCTTCTTCTTCTTCTTCTTCT 618  
QY 610 CAAGGCAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 669  
DB 619 CAGGCTCAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 678  
QY 670 CCATGCTCTTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 729  
DB 679 CCATGCTCTTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 738  
QY 730 GCTCTCTGCAAACTTCATCACTGCACTTACAAAGAA 770  
DB 739 ATCTGCTTCTTAACTTCTATTTTCAAGCAACCGGAAAA 779

RESULT 13

US-09-849-199A-22  
Sequence 22, Application US/09849199A  
Publication No. US20030082754A1  
GENERAL INFORMATION:  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradip  
APPLICANT: Thurmond, Jennifer M.  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Das, Tapas  
TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES  
TITLE OF INVENTION: THERIOF



FILE REFERENCE: 6804.US.01  
 CURRENT APPLICATION NUMBER: US/09/849,199A  
 CURRENT FILING DATE: 2002-04-15  
 NUMBER OF SEQ ID NOS: 38  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO: 22  
 LENGTH: 879  
 TYPE: DNA  
 ORGANISM: Mus musculus  
 US-09-849-199A-22

Query Match 38.3%; Score 345; DB 10; Length 879;  
 Best Local Similarity 65.8%; Pred. No. 3e-103;  
 Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

10 TTCATGCGTCACTCACTAATTTCAAGGCTTCTGGGCCCCCGAATACAGAGTC 69  
 19 TTGATATGAAGTCAATGCTTCTTGACAAATGTTGGACCAAGATTCCTGAGTT 78  
 70 AAGGATGCTTCTCTGACAAATTTACATCCCTACGTTTGTCTGTATTACTTA 129  
 79 CGCGGGTGTCTCTGCTGAGCTCTTACCTCCACCTTATCTCAACATCACTACG 138  
 130 CTCATTGATGCTGGGACCAAAATATATGAAGAACCGGAGCTTCTTGGCGAGGC 189  
 139 CTCCTGATATGCTGGGTAACAAGTACATGAAGAACGAGCTCTGTCTCTCAAGG 198  
 190 ATCTCGAGTGTATACCTTGAGCTGACCTGCTGCTCTACATGTTCTATAGATTG 249  
 199 ATCTCGACCTTGATACCTTGACATCACTTCTTCTGCGTATATGCTGAGAGCTC 258  
 250 GTGACAGTGTGTGGGAGGGAATATACACTTTTCTGCGAGGAAACGACGCGGGA 309  
 259 ATCTCTCGACCTGGGAGGAGGATTACACTTGAAGTACAGATCTCGACAGTGAGA 318  
 310 GAATCCGATATGAAGATATCCGCTCTCTGTTGATCTTCTTCCAACTCATGAA 369  
 319 GAAGGTATGTCCGGGAGGCCAAGCTTGTGGGTGATCACTTCTCCAACTAGTGAG 378  
 370 TTCATGACACCTTTTCTTATCTTGTGAGAGAACACACAGATCACCGTCTCAT 429  
 379 TTCTCGACACGATTTTCTTGTCTGACGAAAAAGCAATGATCACTTCTCTCAT 438  
 430 GTCTACACACAGGTATACATGCTCAATCTGTGTGTGTGATGAATGGGTTCTCTC 489  
 439 GTCTATCACACAGGTATCAATGCTCAATCTGTGTGTGTGATGAATGGGTTCTCTC 498  
 490 GGCAATTCATATTTTGTGGGACACCTGACAGCTTCAATGCTCTCATGATCTGAC 549  
 499 GGTCAAGCTTCTTGTGACCACTGACAGCTTCAATGCTCTCATGATCTGAC 558  
 550 TATGCTCTGCTCTCATCCCTGATGCTGATGCTCTGATGAGAAAAATGATCACT 609  
 559 TACGGCTCTGCTGATGCTGCTGATGCTGATGCTGATGAGAAAAATGATCACT 618  
 610 CAAGGACGCTGTGCTGATGCTGATGCTGATGCTGATGAGAAAAATGATCACT 669  
 619 CAGGCTGAGCTGTGCTGATGCTGATGCTGATGCTGATGAGAAAAATGATCACT 678  
 670 CCATGCTCTCTCTGCTGATGCTGATGCTGATGCTGATGAGAAAAATGATCACT 729  
 679 CCCTGCTCTCTCTGCTGATGCTGATGCTGATGCTGATGAGAAAAATGATCACT 738  
 730 GCTCTCTCTCAAACTTCTACATTCAGATTCAGAAAAA 770  
 739 ATCTGCTCTTAACTTCTATATTCAGATTCAGAAAAA 779

RESULT 14  
 US-10-120-637A-22  
 ; Sequence 22, Application US/10120637A  
 ; Publication No. US20030134400A1  
 ; GENERAL INFORMATION:

APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Thurnmeier, Jennifer M.  
 APPLICANT: Huang, Jung-Sheng  
 APPLICANT: Das, Tapas  
 APPLICANT: Leonard, Amanda E.  
 APPLICANT: Pereira, Suzette L.  
 TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES  
 TITLE OF INVENTION: THEREOF  
 FILE REFERENCE: 6804.US.01  
 CURRENT APPLICATION NUMBER: US/10/120,637A  
 CURRENT FILING DATE: 2002-04-11  
 PRIOR APPLICATION NUMBER: US 09/849,199  
 PRIOR FILING DATE: 2001-05-04  
 NUMBER OF SEQ ID NOS: 73  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO: 22  
 LENGTH: 879  
 TYPE: DNA  
 ORGANISM: Mus musculus  
 US-10-120-637A-22

Query Match 38.3%; Score 345; DB 14; Length 879;  
 Best Local Similarity 65.8%; Pred. No. 3e-103;  
 Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

10 TTCATGCGTCACTCACTAATTTCAAGGCTTCTGGGCCCCCGAATACAGAGTC 69  
 19 TTGATATGAAGTCAATGCTTCTTGACAAATGTTGGACCAAGATTCCTGAGTT 78  
 70 AAGGATGCTTCTCTGACAAATTTACATCCCTACGTTTGTCTGTATTACTTA 129  
 79 CGCGGGTGTCTCTGCTGAGCTCTTACCTCCACCTTATCTCAACATCACTACG 138  
 130 CTCATTGATGCTGGGACCAAAATATATGAAGAACCGGAGCTTCTTGGCGAGGC 189  
 139 CTCCTGATATGCTGGGTAACAAGTACATGAAGAACGAGCTCTGTCTCTCAAGG 198  
 190 ATCTCGAGTGTATACCTTGAGCTGACCTGCTGCTCTACATGTTCTATAGATTG 249  
 199 ATCTCTCGACCTGGGAGGAGGATTACACTTGTGCGTATATGCTGAGAGCTC 258  
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 259 ATCTCTCGACCTGGGAGGAGGATTACACTTGTGCGTATATGCTGAGAGCTC 318  
 310 GAATCCGATATGAAGATATCCGCTCTGTTGATCTTCTTCCAACTCATGAA 369  
 319 GAAGGTATGTCCGGGAGGCCAAGCTTGTGGGTGATCACTTCTCCAACTAGTGAG 378  
 370 TTCATGACACCTTTTCTTATCTTGTGAGAGAACACACAGATCACCGTCTCAT 429  
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 430 GTCTACACACAGGTATACATGCTCAATCTGTGTGTGTGATGAATGGGTTCTCTC 489  
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 550 TATGCTCTGCTCTCATCCCTGATGCTGATGCTCTGATGAGAAAAATGATCACT 609  
 559 TACGGCTCTGCTGATGCTGCTGATGCTGATGCTGATGAGAAAAATGATCACT 618  
 610 CAAGGACGCTGTGCTGATGCTGATGCTGATGCTGATGAGAAAAATGATCACT 669  
 619 CAGGCTGAGCTGTGCTGATGCTGATGCTGATGCTGATGAGAAAAATGATCACT 678  
 670 CCATGCTCTCTCTGCTGATGCTGATGCTGATGCTGATGAGAAAAATGATCACT 729  
 679 CCCTGCTCTCTCTGCTGATGCTGATGCTGATGCTGATGAGAAAAATGATCACT 738



QY 730 GCTCTCTCAAACTTACATTCAGACTTACAAAGAA 770  
 DB 739 ATCTGTCTTAAACTTCTATATTCAGACATACGGAAAA 779

## RESULT 15

US-10-156-911-5

Sequence 5, Application US/10156911

Publication No. US2003016345A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Leonard, Amanda Eun-Yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407.US.P4

CURRENT APPLICATION NUMBER: US/10/156,911

CURRENT FILING DATE: 2002-10-01

PRIOR APPLICATION NUMBER: US 09/903,456

PRIOR FILING DATE: 2001-07-11

PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 122

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 5

LENGTH: 879

TYPE: DNA

ORGANISM: Mus musculus

US-10-156-911-5

Query Match 38.3%; Score 345; DB 14; Length 879;

Best Local Similarity 65.8%; Pred. No. 3e-103; Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

QY 10 TTGATGCTCACTCACTAGTACTATTTCAGGCTTCTGAGGCCCCCGAGATACAGAGTC 69  
 DB 19 TTGATATGAGAGTCAATCTTCTTGAGCAACATGTTGACACGAGATTCGAGTT 78  
 QY 70 AAGATGCTTCTCTGAGCAATTCATCCCTACGTTGTCTGTTATTACTTA 129  
 DB 79 CGGAGTGGTCTCTGAGCACTTACCTCCACCTTCATCCACATACAGTACCTG 138  
 QY 130 CTGATGTATGGTGGGACCAAAATACATGAAGAACGGGAGCGGTTCTTGCGAGGC 159  
 DB 139 CTGCTATATGGCTGGGTAACAAGTACATGAAGAACAGGCTGCTGTCTCTAGGGGC 158  
 QY 190 ATCTGCAATGTATTAACCTTGAGCTCACCCCTGCTCTCTTAATGTTATAGTTG 249  
 DB 199 ATCTCACCTGTATTAACCTTGAGCTCACCTTCTTGCGTATATGCTGTAGAGCTC 258  
 QY 250 GTACACAGTGTGTGGAGGCAATACACTTTTCTGCGAGGAACGACGAGCGCGGA 309  
 DB 259 ATCTCTCAAGCTGGGAGAGGATTACACTTGACGTTCAGAACTTCGACAGTCAGGA 318  
 QY 310 GAATCCGATATGAGATCATCCGCGTCTGTGTGTACTACTTCTCCAAACTATCGAA 369  
 DB 319 GAAGGTAGTCCGGGTACCAAGGCTTGTGTGTGTACTACTTCTCCAAACTAGTGAAG 378  
 QY 370 TTATGAGACACCTTTTCTTCACTCTTGCGAAGAACACACAGATCACCGTCTCCAT 429  
 DB 379 TTCTGAGACAGATTTCTTGTCTTACGAAAAAAGACCAATCAGATCACCTTCTTCAT 438  
 QY 430 GTCTACCAACGAGTACATGCTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 489  
 DB 439 GTCTATCACACGCGCTCATGTTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 498  
 QY 490 GGCATTCATATTTTGT 549

DB 499 GGTCAAGCTTCTTTGAGACCCACCTGAAAGGTTATCCAGTTCTCATGTACTCTAG 558  
 QY 550 TATGCTGTCTCTCATTCGCCGTCCATGCGTCCCTCACTCTGTGTGTGTGTGTGTGTGT 609  
 DB 559 TACGGCTGTCTGT 618  
 QY 610 CAAGGAGAGTGTCCAGTTGT 669  
 DB 619 CAGGCTCAGCTGT 678  
 QY 670 CCATGCTCTTCCCTCTGCGGT 729  
 DB 679 CCTGTGGCTTCCCTTGT 738  
 QY 730 GCTCTCTCAAACTTACATTCAGACTTACAAAGAA 770  
 DB 739 ATCTGTCTTAAACTTCTATATTCAGACATACGGAAAA 779

Search completed: April 1, 2004, 10:45:04

Job time : 383.956 secs

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: April 1, 2004, 04:29:47 / Search time 80.4384 Seconds  
(without alignments)  
6209.168 Million cell updates/sec

Title: US-09-624-670-6

Perfect score: 900  
Sequence: 1 atggaacattcgatcgctc.....ggaagcagcgaagatga 900

Scoring table: IDENTITY NUC  
Gapop 10.0, Gapext 1.0

Searched: 682709 seqs, 27747546 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

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2: /cgn2\_6/ptodata/2/ina/5B.COMB.seq.\*  
3: /cgn2\_6/ptodata/2/ina/6A.COMB.seq.\*  
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5: /cgn2\_6/ptodata/2/ina/PTUS.COMB.seq.\*  
6: /cgn2\_6/ptodata/2/ina/backfile1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	900	100.0	900	4 US-09-903-456-6	Sequence 21, Appl
2	716	79.6	914	4 US-09-759-663-21	Sequence 21, Appl
3	716	79.6	914	4 US-09-903-456-3	Sequence 3, Appl
4	345	38.3	879	4 US-09-903-456-5	Sequence 5, Appl
5	173.4	19.3	377	4 US-09-621-976-12605	Sequence 12605, A
6	137.6	15.3	1482	4 US-09-149-476-258	Sequence 258, App
7	137.6	15.3	1542	4 US-09-149-476-106	Sequence 106, App
8	137.6	15.3	1812	4 US-09-023-655-430	Sequence 430, App
9	127.4	14.2	819	4 US-09-903-456-7	Sequence 7, Appl
10	124.2	13.8	818	4 US-09-903-456-71	Sequence 71, Appl
11	124.2	13.8	819	4 US-09-903-456-69	Sequence 69, Appl
12	124.2	13.8	819	4 US-09-903-456-70	Sequence 70, Appl
13	124.2	13.8	819	4 US-09-903-456-72	Sequence 72, Appl
14	124.2	13.8	819	4 US-09-903-456-73	Sequence 73, Appl
15	124.2	13.8	819	4 US-09-903-456-74	Sequence 74, Appl
16	112	12.4	957	4 US-09-759-663-22	Sequence 22, Appl
17	112	12.4	957	4 US-09-903-456-2	Sequence 2, Appl
18	100.4	11.2	630	4 US-09-903-456-67	Sequence 67, Appl
19	98.4	10.9	124	3 US-09-112-108-45	Sequence 45, Appl
20	62.6	7.0	989	1 US-07-885-970A-7	Sequence 7, Appl
21	62.6	7.0	989	1 US-08-298-687A-7	Sequence 7, Appl
22	62.6	7.0	989	1 US-08-530-797-6	Sequence 6, Appl
23	62.6	7.0	989	1 US-08-298-829-7	Sequence 6, Appl
24	62.6	7.0	989	2 US-08-787-335-6	Sequence 6, Appl
25	55.8	6.2	7218	1 US-08-232-463-14	Sequence 14, Appl
26	53.8	6.0	67	4 US-09-621-976-17477	Sequence 17477, A
27	49	5.4	484	4 US-09-621-976-1588	Sequence 1588, Ap

28	48.2	5.4	834	4 US-09-149-476-259	Sequence 259, App
29	43.2	4.8	289	3 US-09-007-005-17	Sequence 17, Appl
30	43.2	4.8	289	3 US-09-244-796-17	Sequence 17, Appl
31	41.2	4.6	2277	1 US-08-676-967-2	Sequence 2, Appl
32	41.2	4.6	2277	1 US-08-676-974-2	Sequence 2, Appl
33	41.2	4.6	2277	2 US-09-098-487-2	Sequence 2, Appl
34	41.2	4.6	546	4 US-09-669-751-246	Sequence 246, App
35	38.9	4.3	1431	4 US-09-023-655-1148	Sequence 1148, Ap
36	38.8	4.3	1431	6 5245013-5	Sequence 1148, Ap
37	38.8	4.3	1801	1 US-07-847-562-1	Sequence 1, Appl
38	38.8	4.3	1801	1 US-08-240-328-1	Sequence 1, Appl
39	38.8	4.3	1801	2 US-08-215-089-8	Sequence 8, Appl
40	38.8	4.3	1801	2 US-08-990-849-1	Sequence 1, Appl
41	38.8	4.3	1801	5 PCT-US95-03384-8	Sequence 8, Appl
42	38.4	4.3	1801	4 US-09-614-034-192	Sequence 192, App
43	38.4	4.2	587	4 US-09-145-828A-9	Sequence 9, Appl
44	38	4.2	587	4 US-09-903-456-16	Sequence 16, Appl
45	38	4.2	954	4 US-09-145-828A-1	Sequence 1, Appl

#### ALIGNMENTS

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RESULT 1
US-09-903-456-6
; Sequence 6, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Young
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407, US. P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 900
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-903-456-6
Query Match 100.0%; Score 900; DB 4; Length 900;
Best Local Similarity 100.0%; Pred. No. 1.1e-272;
Matches 900; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
1 ATGGAACATTTCGATGCTCAGTCACTACCTATTTCAAGGCTTCCTGGGCCCGAGAT 60
1 ATGGAACATTTCGATGCTCAGTCACTACCTATTTCAAGGCTTCCTGGGCCCGAGAT 60
1 ATGGAACATTTCGATGCTCAGTCACTACCTATTTCAAGGCTTCCTGGGCCCGAGAT 60
61 ACAAGAGTCAAGAGATGCTCTCTCTGGAACAATTCATCCCTAGCTTCTCTGTTCT 120
61 ACAAGAGTCAAGAGATGCTCTCTCTGGAACAATTCATCCCTAGCTTCTCTGTTCT 120
61 ACAAGAGTCAAGAGATGCTCTCTCTGGAACAATTCATCCCTAGCTTCTCTGTTCT 120
121 ATTACTTACTCATTTGATGCTGGGACCAAAATACATGAAGAAGCCGAGCGCTTCT 180
121 ATTACTTACTCATTTGATGCTGGGACCAAAATACATGAAGAAGCCGAGCGCTTCT 180
121 ATTACTTACTCATTTGATGCTGGGACCAAAATACATGAAGAAGCCGAGCGCTTCT 180
181 TGCCGAGCATCTCGCAGTTGATTAACCTTGACCTACCCCTGCTGCTCTACATGTT 240
181 TGCCGAGCATCTCGCAGTTGATTAACCTTGACCTACCCCTGCTGCTCTACATGTT 240
181 TGCCGAGCATCTCGCAGTTGATTAACCTTGACCTACCCCTGCTGCTCTACATGTT 240
241 TATAGTGTGTGACAGGTGTGTGGAGGCAATATCACTTTTCTGCCAGGAACAGCC 300
241 TATAGTGTGTGACAGGTGTGTGGAGGCAATATCACTTTTCTGCCAGGAACAGCC 300

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Dp	241	TATGAGTGGTGA	CAGGTG	TGTGGAGG	CAATCA	CTTTTCTG	CGAGGAA	CAGC	3000
Qy	301	AGGGCGGAGAA	ATCCGATAT	TGAAGAT	CAATCCGCGCTCT	GTGTGTA	CTACTTCTCCAA	3600	
Dp	301	AGCGCGGAGAA	ATCCGATAT	TGAAGAT	CAATCCGCGCTCT	GTGTGTA	CTACTTCTCCAA	3600	
Qy	361	CTCATGGAATTC	ATGAGACAC	CTTTTCTCAT	CTCTCGCA	AGAAACA	CCAGATCAC	4200	
Dp	361	CTCATGGAATTC	ATGAGACAC	CTTTTCTCAT	CTCTCGCA	AGAAACA	CCAGATCAC	4200	
Qy	421	GTGCTCCATG	CTTACCA	CAAGCTAC	ATGCTCAA	CATCTGGTGT	TGTGATCA	4800	
Dp	421	GTGCTCCATG	CTTACCA	CAAGCTAC	ATGCTCAA	CATCTGGTGT	TGTGATCA	4800	
Qy	481	GTTCCTCGG	CGGCAATCAT	TTTGTGTGG	GAACACA	AGATTCAT	CCATGCTCATG	5400	
Dp	481	GTTCCTCGG	CGGCAATCAT	TTTGTGTGG	GAACACA	AGATTCAT	CCATGCTCATG	5400	
Qy	541	TACTGTACTAT	GTGTGTCT	CTCCATCC	CGTCCATAG	GTCCCTA	CTCTGTGTGAAAAG	6000	
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Qy	601	TACATCACT	CAAGGGCAG	CTGGTCCA	GTTTGTGTCT	GAACATAT	CCAGACACTGGGG	6600	
Dp	601	TACATCACT	CAAGGGCAG	CTGGTCCA	GTTTGTGTCT	GAACATAT	CCAGACACTGGGG	6600	
Qy	661	GTCTCTGAG	CATGTCCT	TCCCTCGG	GTGGTGGTCT	CCAGATTTG	ATATATAT	7200	
Dp	661	GTCTCTGAG	CATGTCCT	TCCCTCGG	GTGGTGGTCT	CCAGATTTG	ATATATAT	7200	
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Dp	721	TCCCTGAT	TGCTCTTCA	CAAACTTCA	CATTCA	CTTCAAC	CAAGAAAGGGCCTCT	7800	
Qy	781	CGAGGAAAG	AAACA	CACTGAA	GGCCAC	CGAA	CGGATCTGTGGCGCGTAA	8400	
Dp	781	CGAGGAAAG	AAACA	CACTGAA	GGCCAC	CGAA	CGGATCTGTGGCGCGTAA	8400	
Qy	841	ACCAACAG	CTTCCCTT	CCCTGG	AAAAACA	CGTGAAG	CCAGGAAC	9000	
Dp	841	ACCAACAG	CTTCCCTT	CCCTGG	AAAAACA	CGTGAAG	CCAGGAAC	9000	

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RESULT 2
US-09-769-863-21
Sequence 21, Application US/09769863
Patent No. 6635451
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Huang, Yung-Sheng
APPLICANT: Das, Tapas
APPLICANT: Thurmond, Jennifer
APPLICANT: Peretia, Suzette L.
TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
FILE REFERENCE: 6763.US.01
CURRENT APPLICATION NUMBER: US/09/769,863
CURRENT FILING DATE: 2001-01-25
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FaSTSeq for Windows Version 4.0
SEQ ID NO 21
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-09-769-863-21

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Query Match      79.6%; Score 716; DB 4; Length 914;
Best Local Similarity 87.2%; Pred. No. 7,1e-215;
Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0

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Db      1 ATGGAACATTTCAGTCACCTACTGACCTAGTACCTATTTCAGAGGCGATTGCGAGCCCTCGAGAT 60

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QY	6	ACAAGAGTCAAAAGATGGTTCCTCTGGAACAATTACATCCCTAGCTTGTCTGTCTGT	120
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QY	121	ATTACTTACTGATTTGTATGCTGGGACCAAAATACATGAAGACCGACCCGTTCTCT	180
Db	121	ATATATTACTATTTGTATGCTGGGACCAAAATACATGAAGATTAACAGCCATCTCT	180
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Db	181	TGGCGGAGATTTTGTGTGTATTAACCTTGAATCAACCTGCTCTCTGTATATGTC	240
QY	241	TATGATTTGGTGCAGAGTGTGGGAGGCAAAATACAATTTTCTGCCAGGACAACGC	300
Db	241	TGTGATTTGTATACAGAGATATGGGAAGCAAAATACAATCTTCTGTGAGGCAACGC	300
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QY	361	CTCATGATTTATGGAACACCTTTTCTTCACTCTGTGGAAACAACAACACAGATACC	420
Db	361	CTATATGAATTTATGGAACCTTTCTTCTTCACTCTGTGGAAACAACAACAGATATACG	420
QY	421	GTGCTCATATGTCACCAACCAACGCTACCAATGCTCAACATCTGTGAGTTTGTATGA	480
Db	421	GTCTGTCAAGTACACCAACCAACCTTCATGCTGAACATCTGTGAGTTTGTATGA	480
QY	481	GTTCCCTGGGCGCATTCATATTTTGTGTGCAACCTCAACAGCTTCATCAATGTCATG	540
Db	481	GTCCTCGGCGCACTTATTTTGTGTGCAACCTTAATGCTTCATCAACGTCATG	540
QY	541	TACTGTCATATGATGTGTGCTCCATGCCGTCACATGCTCCCTACTCTGTGTGAAAG	600
Db	541	TACTCTTACTATGATTTGTGTGCTCCATGCCGTCACATGCTCCCTACTCTGTGTGAAAG	600
QY	601	TACATCACTCAAGGCGACGTGTGTCCAGTTTGTCTGACATCATTCACAAGCACTGCGG	660
Db	601	TACATCACTCAAGGCGACGTGTGTTCAGTTTGTCTGACATCATTCACAAGCACTGCGG	660
QY	661	GTCCTGTGCGCATGTCCTCCCTGCTGGGGGGGCGTTCCTTCAGATTTGGAATACATAT	720
Db	661	GTCATCTGGCGGTCACATTCCTCTTGTGTGTGTATTTTCCAGATTTGGAATACATAT	720
QY	721	TCCCTGATTTGCTCTTTCACAATCTTCAATTCAGATTCACAACAAGAGGCGCTCT	780
Db	721	TCCCTGATTTGCTCTTTCACAATCTTCAATTCAGATTCACAACAAGAGGCGCTCT	780
QY	781	CGAGGAAAGACCACTTGAAGGCGCACAGAACGGGTGTGTGGCGCGCTCAACGAC	840
Db	781	CGAAGAAAGACCACTTGAAGGCGCACAGAAATGGGTCCGTGTGTGAATGACAC	840
QY	841	ACCAACAGCTTCCCTTCCCTGGAAAAACGCGTGAAGCCACAGAACACGAAAGATTTGA	900
Db	841	ACCAACAGCTTTTCACTCCCTGGAAAAACATGTGAAGCCAGAAAGATCTCGGAAGATTTGA	900

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RESULT 3
US-09-903-456-3
; Sequence 3, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Susette L.
; TITLE OF INVENTION: ELONGASS GENES AND USES THEREOF
; FILE REFERENCE: 6407_US_P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIORITY APPLICATION NUMBER: US 09/624,670

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; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 3  
 ; LENGTH: 914  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 US-09-903-456-3

Query Match 79.6%; Score 716; DB 4; Length 914;  
 Best Local Similarity 87.2%; Pred. No. 7,1e-215;  
 Matches 785; Conservative 0; Mismatches 115; Indels 0; Gaps 0;

QY 1 ATGAGACATTCGATGCGTCACTAGTACCTATTTCAGGCGCTTCTGCGCCCGAGAT 60  
 DB 1 ATGAGACATTCGATGCGTCACTAGTACCTATTTCAGGCGCTTCTGCGCCCGAGAT 60  
 QY 61 ACAAGATCAAGAGATGCTTCTCTGGAACATTACCTCCCTACGTTTGTCTGTCT 120  
 DB 61 ACTAGAGTAAAGAGATGCTTCTCTGGAACATTATACCCACATTTATCTGCTCTGTC 120  
 QY 121 ATTTACTACTCATGTATGCGTGGAGCAAAATATACGAAGAACCGGCGGCTCTCT 180  
 DB 121 ATATTTTACTAATTTGATGCTGAGCAAAATATACGAAGAAATACAGCATTTCTCT 180  
 QY 181 TGCCGAGCATCTGCACTGTATATACCTTGAGTACCTGCTGTCTCTATCATGTC 240  
 DB 181 TGCCGAGCATTTTATGATGCTATATACCTTGAGTACCTGCTGTCTCTATCATGTC 240  
 QY 241 TATGATGTGAGACAGGTGTGGAGAGGCAATATACCTTTTCCGAGGGAACAGC 300  
 DB 241 TGTGATGTGAGACAGGTGTGGAGAGGCAATATACCTTTTCTGTCAGGACACGC 300  
 QY 301 AGCGGAGAGATCCGATATAGATATACCGCGCTCTGTGTGTACTATTCTCCAA 360  
 DB 301 ACCGAGAGAGATCCGATATAGATATACCGCGCTCTGTGTGTACTATTCTCCAA 360  
 QY 361 CTGATGATTCATGAGACCTTTTCTTCTATCTTGTGGAAGAACCAACCGAGTACC 420  
 DB 361 CTGATGATTCATGAGACCTTTTCTTCTATCTTGTGGAAGAACCAACCGAGTACC 420  
 QY 421 GTGCTCATGTCTACCAACGCTACCATGCTCAACATCGTGTGTGTGATGATG 480  
 DB 421 GTGCTCATGTCTACCAACGCTACCATGCTCAACATCGTGTGTGTGATGATG 480  
 QY 481 GTTCCCTGCGGCATTCATTTTGTGTGCACTGCAACAGCTTCATCATGTCTCATG 540  
 DB 481 GTTCCCTGCGGCATTCATTTTGTGTGCACTGCAACAGCTTCATCATGTCTCATG 540  
 QY 541 TACTGTACTATGTCTCTCTCCATCCCGTCACTGCTGCTGCTGCTGCTGCTGCTG 600  
 DB 541 TACTGTACTATGTCTCTCTCCATCCCGTCACTGCTGCTGCTGCTGCTGCTGCTG 600  
 QY 601 TACATCACTCAAGGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660  
 DB 601 TACATCACTCAAGGAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660  
 QY 661 GTTCTTGTGCGCATGCTCTTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720  
 DB 661 GTTCTTGTGCGCATGCTCTTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720  
 QY 721 TCCCTGATGCTCTCTTCAAACTTCACTTCACTTCACTTCACTTCACTTCACTTCA 780  
 DB 721 TCCCTGATGCTCTCTTCAAACTTCACTTCACTTCACTTCACTTCACTTCACTTCA 780  
 QY 781 CGAGAGAAAGACCACTTGAAGGAGCAACGAGGCTGTGTGCGCGCTCAAGGAC 840  
 DB 781 CGAGAGAAAGACCACTTGAAGGAGCAACGAGGCTGTGTGCGCGCTCAAGGAC 840

QY 841 ACCAAGACCTTCCCTTCCCTGAGAAACAGCTGAGAGCCAGAGACAGGAAAGATTGA 900  
 DB 841 ACCAAGACCTTCCCTTCCCTGAGAAACAGCTGAGAGCCAGAGACAGGAAAGATTGA 900

RESULT 4  
 US-09-903-456-5

; Sequence 5, Application US/09903456  
 ; Patent No. 6677145  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OR INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407 US.P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; PRIOR FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 5  
 ; LENGTH: 879  
 ; TYPE: DNA  
 ; ORGANISM: Mus musculus  
 US-09-903-456-5

Query Match 38.3%; Score 345; DB 4; Length 879;  
 Best Local Similarity 65.8%; Pred. No. 2.7e-98;  
 Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

QY 10 TTGAGTGCCTACTACTAGTACTATTTCAGGCGCTTCTGCGCCCGAGATTCAGAGTC 69  
 DB 19 TTGATATAGAGCAATGCTTCTTGAGCAACATGTTGACACAGAGATTCAGAGTT 78  
 QY 70 AAAGAGGTGCTCCCGGAGCAATTCATCCGAGCTTGTGCTGTATTTACTTA 129  
 DB 79 CGGAGGTGCTCCCGGAGCAATTCATCCGAGCTTGTGCTGTATTTACTTA 138  
 QY 130 CTCATTTATAGGTGAGCAACCAATATACATAGAACAGGCGAGCGGTCCTTCTGCGAGGC 189  
 DB 139 CTCATTTATAGGTGAGCAACCAATATACATAGAACAGGCGAGCGGTCCTTCTGCGAGGC 198  
 QY 190 ATCTGCAAGTTTATTAACCTTGACATCACTCTGCTCTCTACATGTTTATGATG 249  
 DB 199 ATCTGCAAGTTTATTAACCTTGACATCACTCTGCTCTCTACATGTTTATGATG 258  
 QY 250 GTGACAGGTGTGTGAGAGGCAATTAACATTTTCTGCGAGGAAACGACAGCGGGA 309  
 DB 259 ATCTCTCCAGCTGTGAGAGGCAATTAACATTTTCTGCGAGGAAACGACAGCGGGA 318  
 QY 310 GAATCCGATATGAAGATCACTCCGCTCTGTGTGTATCTACTTCTCCAACTCATCGAA 369  
 DB 319 GAATCCGATATGAAGATCACTCCGCTCTGTGTGTATCTACTTCTCCAACTCATCGAA 378  
 QY 370 TTGATGAGACCTTTTCTTCTATCTTCTGCAAGAACACACAGATCAACCGGTCTCAT 429  
 DB 379 TTGATGAGACCTTTTCTTCTATCTTCTGCAAGAAAACCAATAGATCAACCTTCTCAT 438  
 QY 430 GTTACACACAGCTACATCTGATCATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 489  
 DB 439 GTTACACACAGCTACATCTGATCATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 498  
 QY 490 GGCATTCATATTTTGT 549  
 DB 499 GGCATTCATATTTTGT 558

QY 550 TANGCTGTCCCTCCATCCCGTCCATGCGTCCCTACCTCTGTGGAAAAAGTACACT 609  
DB 559 TAGGCTGTGTGTGTGTCCCGTCCATGCAAGTACCTTTGTGAAAGATCTCACA 618  
QY 610 CAAGGACAGCTGATCCAGTTTGTGCTGCAATATCAGACAGACCTGGGGTCTTGG 659  
DB 619 CAGGCTCAGCTGATGAGTTGCTACTCAGCATCAGCAGCAGGAGTGGCGTGTAG 678  
QY 670 CCATGCTCCTTCCCTCTGCGGGTGGCTGTCTTCCAGATTGGATATGATTTCTTAT 729  
DB 679 CCTGTGGCTTCCCTTGGCTGTCTCAGTCTTCCAGTCTTCTATATGATGACGCTGTC 738  
QY 730 GCTCTCTCACAACCTTACATTCAGACTTACAACAGAA 770  
DB 739 ATCCGTCTTAACTTATATTTAGACATTCGGAAAA 779

RESULT 5  
US-09-621-976-12605  
; Sequence 12605, Application US/09621576  
; Patent No. 6639063  
; GENERAL INFORMATION:  
; APPLICANT: Dumas Milne Edwards, J.B.  
; APPLICANT: Jober, S.  
; APPLICANT: Giordano, J.Y.  
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.  
; FILE REFERENCE: GENSET.054PR2  
; CURRENT APPLICATION NUMBER: US/09/621, 976  
; CURRENT FILING DATE: 2000-07-21  
; NUMBER OF SEQ ID NOS: 19335  
; SOFTWARE: Patent.pm  
; SEQ ID NO 12605  
; LENGTH: 377  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-621-976-12605

Query Match 19.3%; Score 173.4; DB 4; Length 377;  
Best Local Similarity 83.7%; Pred. No. 1.4e-44;  
Matches 195; Conservative 1; Mismatches 37; Indels 0; Gaps 0;

QY 1 ATGAGACATTTGGATGCGGCTGCTAGTCCCTATTTCAAGGGCTTCCGGGCGCGAGAT 60  
DB 144 ATGAGACATTTGGATGCGGCTGCTAGTCCCTATTTCAAGGGCTTCCGGGCGCGAGAT 203  
QY 61 ACAAGATCAAGAGATGTTCTCTCTGACATTTACATCCCTAGCTTGTCTGTCT 120  
DB 204 ACTAGAGTAAAGAGATGTTCTCTCTGACATTTATACCACTTATCTGCTGTCT 263  
QY 121 ATTACTTACTATTTATAGGCTGGAGCCAAATATCATGAAGAACCGGACCGCTTCT 180  
DB 264 ATATATTCTATATTGTATGCTGGAGCCAAATATCATGAAGAAATAAACGCAATCTCT 323  
QY 181 TGCCGAGGACCTCGAGTTGTATATACCTTGGACACCTGCTGTCTCTTA 233  
DB 324 TGCCGGGAGATTTTACTGTGTATTAASCTTGACCTACACGCTGTCTCTTA 376

RESULT 6  
US-09-149-476-258  
; Sequence 258, Application US/09149476  
; Patent No. 6420526  
; GENERAL INFORMATION:  
; APPLICANT: Rosen et al.  
; TITLE OF INVENTION: 186 Human Secreted proteins  
; FILE REFERENCE: P2002P1  
; CURRENT APPLICATION NUMBER: US/09/149, 476  
; EARLIER FILING DATE: 1998-09-08  
; EARLIER APPLICATION NUMBER: PCT/US98/04493  
; EARLIER FILING DATE: 1998-03-06  
; EARLIER APPLICATION NUMBER: 60/040,162  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: 60/040,333

EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/038,621  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,626  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,334  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,336  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,163  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/047,600  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,615  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,597  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,502  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,633  
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EARLIER APPLICATION NUMBER: 60/047,583  
EARLIER FILING DATE: 1997-05-23  
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EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,618  
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EARLIER APPLICATION NUMBER: 60/047,503  
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EARLIER APPLICATION NUMBER: 60/047,592  
EARLIER FILING DATE: 1997-05-23  
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EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,584  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,500  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,587  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,492  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,598  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,613  
EARLIER FILING DATE: 1997-05-23  
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EARLIER APPLICATION NUMBER: 60/047,596  
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EARLIER APPLICATION NUMBER: 60/047,612  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,632  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,601  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/043,580  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,568  
EARLIER FILING DATE: 1997-04-11  
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EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,569  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,311  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,671  
EARLIER FILING DATE: 1997-04-11  
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EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,669  
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EARLIER FILING DATE: 1997-04-11

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EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/048,974
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/056,886
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,877
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,889
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EARLIER APPLICATION NUMBER: 60/056,864
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EARLIER APPLICATION NUMBER: 60/056,631
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EARLIER APPLICATION NUMBER: 60/057,761
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/047,595
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,599
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,588
EARLIER FILING DATE: 1997-05-23
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EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,590
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,594
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,589
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,593

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EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/047,614
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,578
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/043,576
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/047,501
EARLIER FILING DATE: 1997-05-23
EARLIER APPLICATION NUMBER: 60/043,670
EARLIER FILING DATE: 1997-04-11
EARLIER APPLICATION NUMBER: 60/056,632
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,664
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EARLIER APPLICATION NUMBER: 60/056,876
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,881
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,909
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,875
EARLIER FILING DATE: 1997-08-22
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EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/056,908
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/048,964
EARLIER FILING DATE: 1997-06-06
EARLIER APPLICATION NUMBER: 60/057,650
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/056,884
EARLIER FILING DATE: 1997-08-22
EARLIER APPLICATION NUMBER: 60/057,669
EARLIER FILING DATE: 1997-09-05
EARLIER APPLICATION NUMBER: 60/049,610
EARLIER FILING DATE: 1997-06-13
EARLIER APPLICATION NUMBER: 60/061,060
EARLIER FILING DATE: 1997-10-02

Query Match      15.3%; Score 137.6; DB 4; Length 1482;
Best Local Similarity 57.0%; Pred. No. 5.4e-33;
Matches 292; Conservative 0; Mismatches 214; Indels 6; Gaps 2;

QY 131 TCATTGATGCTGGAGCAAAATACATGAAGACGGACCGCTTCTTGGCGAGGCA 190
DB 215 TCGTTCTCTACCTTGGGCTCGGACATGCTAATGCGAAGCCCTTCAGCTCGTGCT 274
QY 191 TCTGCAATTGTATTAACCTTGAGCTACCCCTGCTGTCTCTATCAATGTTATGAGTTGG 250
DB 275 TCATGATTTGTCTACAACTTCTCACTGTGTGACCTTCCCTCTATGTTGATGAGTTCC 334
QY 251 TGACAGGTGTGGAGGGCAAAATACAACTTTTCTG---CCAGGGAACAGGAGCGCG 307
DB 335 TGAATGCGAGCTGAGCACTATACCTGCGGCTGTATCCCTGTGAGATATTCACA 394
QY 308 GAGATCCGATATGAAGATCAATCCGCGCTCTGTGTGATGATGATGATGATGATG 367
DB 335 GCCCGAGGCACTTAGATGAGTGGGTGGGCTGCGCTTCTCTTCCAAATTTATGG 454
QY 368 AATTCATGAGACCTTTTCTTCTATCCTTGGCAAGAACCAACCAAGATACCGTCTCC 427
DB 455 AGCTGATGACACAGTATCTTATTTCTCGAAGAAAGCGGAGAGTACCTTCTCTAC 514
QY 428 ATGTCTACACACGCTTACCACTGCTCAACATGTGTGTTGTGATGAACGTGGTTCCCT 487
DB 515 ATGTCTTCACTCACTGTGTGCTTCCCTGAGGCTGTGTGGGGGTAAAGATTGCCCG 574
QY 488 GCGGCAATTCATATTTTGTGTGCGACATCAACAGCTTCAATCCATGCTCATGATCCGT 547
DB 575 GAGGAATGGCTCTTCCATGCGCATGATAAATCTTCCGTGATGATGATGATGATGAT 634

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QY 548 ACATATGCTCTGCTCCAT---CCCGTCATGGCTCCCTACTCTGCTGAAAAGTACA 604  
DB 635 ACTACGATTATATGCTCTGCTGCGCAACCCGACTTGGTGGAAGACACA 694  
QY 605 TCATCAAGGCGAGCTGCTGCAGTTGTGCTG 636  
DB 695 TGACAGCATTCAGCTGATCCAGTTGTGCTG 726

RESULT 7  
US-09-149-476-106  
; Sequence 106, Application US/09149476  
; Patent No. 6420526  
; GENERAL INFORMATION:  
; APPLICANT: Rosen et al.  
; TITLE OF INVENTION: 186 Human Secreted proteins  
; FILE REFERENCE: P2002P1  
; CURRENT APPLICATION NUMBER: US/09/149,476  
; EARLIER FILING DATE: 1998-09-08  
; EARLIER APPLICATION NUMBER: PCT/US98/04493  
; EARLIER FILING DATE: 1998-03-06  
; EARLIER APPLICATION NUMBER: 60/040,162  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: 60/040,333  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: 60/038,621  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: 60/040,626  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: 60/040,334  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: 60/040,336  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: 60/040,163  
; EARLIER FILING DATE: 1997-03-07  
; EARLIER APPLICATION NUMBER: 60/047,600  
; EARLIER FILING DATE: 1997-05-23  
; EARLIER APPLICATION NUMBER: 60/047,615  
; EARLIER FILING DATE: 1997-05-23  
; EARLIER APPLICATION NUMBER: 60/047,597  
; EARLIER FILING DATE: 1997-05-23  
; EARLIER APPLICATION NUMBER: 60/047,502  
; EARLIER FILING DATE: 1997-05-23  
; EARLIER APPLICATION NUMBER: 60/047,633  
; EARLIER FILING DATE: 1997-05-23  
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; EARLIER APPLICATION NUMBER: 60/047,617  
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; EARLIER APPLICATION NUMBER: 60/047,618  
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; EARLIER FILING DATE: 1997-05-23  
; EARLIER APPLICATION NUMBER: 60/047,592  
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; EARLIER FILING DATE: 1997-05-23  
; EARLIER APPLICATION NUMBER: 60/047,582  
; EARLIER FILING DATE: 1997-05-23  
; EARLIER APPLICATION NUMBER: 60/047,596

EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,612  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,632  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,601  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/043,580  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,568  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,314  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,671  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,674  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,669  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,312  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,313  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,672  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,315  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/048,974  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/056,986  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,877  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,889  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,893  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,630  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,878  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,662  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,872  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,882  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,637  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,903  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,888  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,879  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,880  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,894  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,911  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,636  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,874  
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EARLIER APPLICATION NUMBER: 60/056,910  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/056,864  
EARLIER FILING DATE: 1997-08-22

EARLIER APPLICATION NUMBER: 60/056,631  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,845  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,892  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/057,761  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/047,595  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,599  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,588  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,585  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,586  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,590  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,594  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,589  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,593  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/047,614  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/043,578  
 EARLIER FILING DATE: 1997-04-11  
 EARLIER APPLICATION NUMBER: 60/043,576  
 EARLIER FILING DATE: 1997-04-11  
 EARLIER APPLICATION NUMBER: 60/047,501  
 EARLIER FILING DATE: 1997-05-23  
 EARLIER APPLICATION NUMBER: 60/043,670  
 EARLIER FILING DATE: 1997-04-11  
 EARLIER APPLICATION NUMBER: 60/056,632  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,664  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,876  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,881  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,909  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,875  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,862  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,887  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/056,908  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/048,964  
 EARLIER FILING DATE: 1997-05-06  
 EARLIER APPLICATION NUMBER: 60/057,650  
 EARLIER FILING DATE: 1997-09-05  
 EARLIER APPLICATION NUMBER: 60/056,884  
 EARLIER FILING DATE: 1997-08-22  
 EARLIER APPLICATION NUMBER: 60/057,669  
 EARLIER FILING DATE: 1997-09-05  
 EARLIER APPLICATION NUMBER: 60/049,610  
 EARLIER FILING DATE: 1997-06-13  
 EARLIER APPLICATION NUMBER: 60/061,060  
 EARLIER FILING DATE: 1997-10-02

Query Match 15.3% Score 137.6; DB 4; Length 1542;  
 Best Local Similarity 57.0%; Pred. No. 5,5e-33;  
 Matches 292; Conservative 0; Mismatches 214; Indels 6; Gaps 2;

131 TATTGTATGCTGGACCAAAATATCATGAAACCGGACGCTTCTCTTCCGAGGCA 190

243 TCGTCTCTCACTGGGCTCGCATGATGCTAATGGAAGCCCTCCAGCTCCGTGCT 302  
 191 TCCGCAAGTGTATTAACCTTGACATCAACCTGCTCTGTATATGTTATGATGG 250  
 303 TCATGATGTTCTACACTTCTCACTGATGACATCTTCCCTTACATTTGTTAGTTCC 362  
 251 TGAAGATGTTGAGGAGGCAATATACATTTTCTG---CGAGGAACACGACGCGG 307  
 363 TGAATGCGGCTGGCTGAGCACTATACCTGAGGCGTGAACCTGTGACATTCACA 422  
 308 GAGATCCGATATGAAGATATCCGCTCTCTGTGTGATCACTTCTTCAACATG 367  
 423 GCGCTGAGCACTAGATGTTGCGGTGCGCTCTCTCTCTTCTTCAAGTTATG 482  
 368 AATCATGACACCTTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 427  
 483 AGCTGATGACACAGTATCTTATTTCTCGAAGAAACGCGGAGGATCTTCTTCT 542  
 428 ATGTCTACCAACGCTACCACTGCTCAATCTGTTGTTGATGAACCTGGTTCCCT 487  
 543 ATGCTTCCATCACTCTGTCCTTCCCTGAGGCTGTTGAGGAGGATTAAGATTC 602  
 488 GCGGCAATGATATTTTGTGAGGACACTGAACGCTTCACTGCTCATGTTACTGT 547  
 603 GAGGAATGGCTCTTTCATGATGATTAATCTTCCGATGATGATGATGATGAT 662  
 548 ACTATGCT 604  
 663 ACTAGGATTTATCTGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT 722  
 605 TCATCAAGGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 636  
 723 TGACAGCAATTCAGCTGATTCAGTTGCTG 754

RESULT 8  
 US-09-023-655-430  
 Sequence 430, Application US/09023655  
 Patent No. 6607879  
 GENERAL INFORMATION:  
 APPLICANT: Cocks, Benjamin G.  
 APPLICANT: Susan G. Stuart  
 APPLICANT: Jeffrey J. Sellhammer  
 TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE  
 NUMBER OF SEQUENCES: 1508  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: INCYTE PHARMACEUTICALS, INC.  
 STREET: 3174 PORTER DRIVE  
 CITY: PALO ALTO  
 STATE: CALIFORNIA  
 COUNTRY: USA  
 ZIP: 94304  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/023,655  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER:  
 FILING DATE:  
 CLASSIFICATION:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Zeller, Karen J.  
 REGISTRATION NUMBER: 37,071  
 REFERENCE/DOCKET NUMBER: PA-0001 US  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (650) 855-0555  
 TELEFAX: (650) 845-4166



```

; INFORMATION FOR SEQ ID NO: 430:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 1812 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
; IMMEDIATE SOURCE:
;   LIBRARY: URETTU01
;   CLONE: 1658706
US-09-023-655-430

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Query Match      15.3%; Score 137.6; DB 4; Length 1812;
Best Local Similarity 57.0%; Pred. No. 6.1e-33;
Matches 292; Conservative 0; Mismatches 214; Indels 6; Gaps 2;

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QY 131 TCATTGATGCTGGGACCAAAATACATGAAGACCGAGCGCTTCCTTCCGAGACA 190
DB 570 TCGTCTCTCACTTGGGCTCGCATATGGCTATATGAAGCCCTTCCAGCTCCGGCT 629
QY 191 TCCTGCAATTGATTAACCTTGAACCTGCTGCTCTCTACATGTTCTATGAGTTGG 250
DB 630 TCATGATTGCTCAACACTTCTCACTGATGCACTTCCCTCTACATTTGCTATGATTCC 689
QY 251 TGACAGGTGTGTGGAGGCGAATATACACTTTTCTG---CGAGGAACAGCGAGCGG 307
DB 690 TGATGTGGGCTGGTGAAGCACTTATACCTGGGCTGTGACCCCTGTGACTATTCACA 749
QY 308 GAGATCCGATATGAAGATCATCCGGCTCCTGTGATGTAATCTTCTCCAACTCATCG 367
DB 750 GCCCTGAGCACTTATGATGTGTCGGGTGGCCCTGCTCTCTCTTCCAACTCATG 809
QY 368 AATTCATGACACCTTTTCTTCACTCTTGTGCAAGAACACACACATCAGCTGCTCC 427
DB 810 AGCTGAATGAGACAGATATCTTATTTCTCGAAAGAAACAGGAGTGAACCTTCTTAC 869
QY 428 ATGCTACCAACGAGCTACCATCTCAACATCTGTGTGTTGTGATGAATGGTTCCT 487
DB 870 ATGCTTCCATCACTCTGTGCTTCTCCGAGCTGTGTGGGGGTAAGATTGCCCGG 929
QY 488 GCGGCATTCATATTTTGTGTGACACATCAAGCTTCAATGATGCTCATGTAATGCT 547
DB 930 GAGGATGGGCTCTTTCATGCGATGATTAAGCTTCCGTGATGATGATGATGCTGCT 589
QY 548 ACTATGCTGTCTCTCAT---CCGCTCATGTCCTTCACTCTGTGTGAAAAATGACA 604
DB 990 ACTACGATTATCTGCTTGTGGCTGTGTGCAACACCTTCTGTGTGAAAAAGACA 1049
QY 605 TCACTCAAGGACAGTGTCCAGTTGTGCTG 636
DB 1050 TGACAGCCATTTCAGCTGATTCAGTTGTGCTG 1081

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RESULT 9  
US-09-903-456-7

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; Sequence 7, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116

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; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
US-09-903-456-7

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Query Match      14.2%; Score 127.4; DB 4; Length 819;
Best Local Similarity 52.7%; Pred. No. 6.1e-30;
Matches 325; Conservative 0; Mismatches 286; Indels 6; Gaps 2;

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QY 157 ATGAGAACCGGACCGCTTCTTTCCGAGGATCTCGCACTGTATACCTTGGACTC 216
DB 181 AAGCAATGAGAAAGCTTTTGAAGCTCAAGACATCAAGCTTGGACAACTTGTCTC 240
QY 217 ACCCTGCTCTCTCTACATGTTCTATGATGTTGGAGACAGGTGTGTGGAGGCAATAC 276
DB 241 TTGGACCTTCTTGTACATGTGCTGTGAGACATCCGCGCATTCCTGGAGGCTAC 300
QY 277 AACTTTTCTGCAAGGAAACAGCAGCGGAGAAATCCATATGAAATCAT---CCGC 333
DB 301 AAGTGTGTAAGAACAGATGAGAGAGGCAACAGTCTCATGTCTCAGGCGATGTCTGC 360
QY 334 GTCTTGTGTACTTCTTCCAACTCATTCATTCATGACACCTTTTCTGATC 393
DB 361 ATCGTGTAGTGTCTTACGTGTCCAGGCATACAGTGTCTTGATATCCGCATATGATC 420
QY 394 CTTCGAAAGAACACACAGATCACCGTGTCCATGTCTACCAACAGCTTACCATGCTC 453
DB 421 CTTTGAAAGATTCACACAGGTTCTTCTTGATGTATGACACACATGACACATTTT 480
QY 454 AACATGTGTGTGTGTATGAACGTGGTTCCTGCGGCACTCATATTTGTGACACA 513
DB 481 GCCATCTGTGGGCTATCGCCAAAGTACCTCCAGAGGTGATGGTACTTTTCAATGATC 540
QY 514 CTCAACAGTTCATCATGCTCTCATGTACTGTACTGTATGATGTCTCTCCATCCGCTC 573
DB 541 CTCACTCTTTGTGTGACACGCTCATGTACGATATCTTCTCTCCCAAGGATTC 600
QY 574 ATGCGCTCTTACCTCTGTGTGAAAAAGTATCACTCAAGGACAGTGTGCAAGTTGTG 633
DB 601 GGGTGTGTAACCA---ATCAAGCGCTATCATCACACCTTCAGATACCAAGTTATG 657
QY 634 CTGACATATATCAACAGACCTGCGGGGCTTGTGGCCATGCTCTTCCCTGCGGATG 693
DB 658 GCAATGCTGTGAGTCTTGTGACATCACTCTTCCATGCACTACCCAGAGCTTT 717
QY 694 CTGTTCTTCAGATTGATATCATGATTTCCGTGATGCTCTTTCACAACTTCAATT 753
DB 718 GTGCAAGCTCTTGAAGTATGATATCATCACTTGTGCTGCTTCCGCACTTTTGTG 777
QY 754 CAGACTTACACAAAGA 770
DB 778 CAGAGCTATCTTAAAAA 794

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RESULT 10  
US-09-903-456-71

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; Sequence 71, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095

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PRIOR FILING DATE: 1999-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 116  
 SOFTWARE: FASTSEQ for Windows Version 4.0  
 SEQ ID NO 71  
 LENGTH: 818  
 TYPE: DNA  
 ORGANISM: Thraustochytrium aureum  
 US-09-903-456-71

Query Match 13.8%; Score 124.2; DB 4; Length 818;  
 Best Local Similarity 52.4%; Pred. No. 6,2e-29;  
 Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 157 ATGAAGAACCGGACCCGCTCTCTTCCGAGGACCTCTGCAAGTTGTAATACCTTGACTC 216  
 Db 180 AAGCAGATGAGAAAGCCCTTTGAGCTCAAGCATCAAGCTCTTGACACAACCTGTTCTC 239  
 QY 217 ACCCTGCTCTCTCTACATGTTCTATGAGTGTGACAGATGTGTGGAGGCAATAC 276  
 Db 240 TTGGACCTTCTCTGTACATGTGCTGAGACCATCCGCAAGCTATCTCGAGGCTAC 299  
 QY 277 AACTTTTCTGCCAGGAAACGACGCGGGAGATCCGATATGAAGATCAT--CCGC 333  
 Db 300 AAAGTTTGAAGAACGACATGAGAGGGCAAGCTCATGTCTGAGGACATGTCTCGC 359  
 QY 334 GTCCCTGTGTGTAATCTTCTCCAACTCATGAAATTCATGACACCTTTTCTTCATC 393  
 Db 360 ATCGTAGTGTGTGTAGGTGTCCAGGACATACAGTCTTGATACGCCCATCATGATC 419  
 QY 394 CTTCGCAAGAACCAACACAGATACCGGTGCTCCATGTCTACACACAGGCTACATGCTC 453  
 Db 420 CTTCGCAAGAGTTCAACCAAGTTCCTCTTGCAATGTATACCACTGCAACATTTT 479  
 QY 444 AACATCTGTGTGTGTGATGAACCTGGGTTCCCTGCGGCAATTCATATTTTGTGACA 513  
 Db 480 GCCATCTGTGTGTGTATGCCAAGTACGCTCCAGAGATGATGTGATCTTTACATGATC 539  
 QY 514 CTCAACAGCTTCATCATGCTCTCATATGACTGACTATGATGCTGCTTCATCCGCTCC 573  
 Db 540 CTCAACCTTTCTGTCGACACCGCTATGTACGATACATCTTCTCTCTCCAAAGGCTC 599  
 QY 574 ATGCGTCCCTACCTCTGTGTGAAAAAGTACATCACTCAAGGGCAGCTGTCAAGTTGTG 633  
 Db 600 GGGTTCGTAAGCCA--ATCAAGCCGTACATCAACCCCTTGATGACCCAGGCTTACG 656  
 QY 634 CTGAATATCATCCAGACACTGGGGGCTTCTGGCAATGCTCTTCCCTTCGGGTGG 693  
 Db 657 GCATGCTGTGTGACATCTTGTACGACTACCTTCCCATGCGATACCCACAGGCTCTT 716  
 QY 694 CTGTTCTTCCAGATTGATATGATATTTCCCTGATGCTCTCTTCAAACTTCAAT 753  
 Db 717 GTGCAAGCTTTCTTGAGTATCATATCACTGTGCTTCCCTTCGCAACTTTTGTG 776  
 QY 754 CAGACTTACAAACAGAA 770  
 Db 777 CAGAGCTATCTTAAAAA 793

RESULT 11  
 US-09-903-456-69  
 Sequence 69, Application US/09903456  
 Patent No. 6677145  
 GENERAL INFORMATION:  
 APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Leonard, Amanda Eun-Yeong  
 APPLICANT: Huang, Yung-Sheng  
 APPLICANT: Pereira, Suzette L.  
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 FILE REFERENCE: 6407 US.P3  
 CURRENT APPLICATION NUMBER: US/09/903,456

CURRENT FILING DATE: 2001-07-11  
 PRIOR APPLICATION NUMBER: US 09/624,670  
 PRIOR FILING DATE: 2000-07-24  
 PRIOR APPLICATION NUMBER: US 09/379,095  
 PRIOR FILING DATE: 1999-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 116  
 SOFTWARE: FASTSEQ for Windows Version 4.0  
 SEQ ID NO 69  
 LENGTH: 819  
 TYPE: DNA  
 ORGANISM: Thraustochytrium aureum  
 US-09-903-456-69

Query Match 13.8%; Score 124.2; DB 4; Length 819;  
 Best Local Similarity 52.4%; Pred. No. 6,2e-29;  
 Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 157 ATGAAGAACCGGACCCGCTCTCTTCCGAGGACCTCTGCAAGTTGTAATACCTTGACTC 216  
 Db 181 AAGCAGATGAGAAAGCCCTTTGAGCTCAAGCATCAAGCTCTTGACACAACCTGTTCTC 240  
 QY 217 ACCCTGCTCTCTCTACATGTTCTATGAGTGTGACAGTGTGTGGAGGCAATAC 276  
 Db 241 TTGGACCTTCTCTGTACATGTGCTGAGACCATCCGCAAGCTATCTCTGAGGCTAC 300  
 QY 277 AACTTTTCTGCCAGGAAACGACGCGGGAGATCCGATATGAAGATCAT--CCGC 333  
 Db 301 AAAGTTTGAAGAACGACATGAGAGGGCAAGCTCATGTCTGAGACATGTCTCGC 360  
 QY 334 GTCCCTGTGTGTAATCTTCTCCAACTCATGAAATTCATGACACCTTTTCTTCATC 393  
 Db 361 ATCGTAGTGTGTGTAGGTGTCCAGGACATACAGATCTTGATACCCCATCATGATC 420  
 QY 394 CTTCGCAAGAACCAACACAGATACCGGTGCTCCATGTCTACACCAAGCTACATGCTC 453  
 Db 421 CTTCGCAAGAGTTCAACCAAGTTCCTCTTGCAATGTATACCAATGCAATTCATTT 480  
 QY 444 AACATCTGTGTGTGTGATGAACCTGGGTTCCCTGCGGCAATTCATATTTTGTGACA 513  
 Db 481 GCCATCTGTGTGTGTATGCCAAGTACGCTCCAGAGATGATGTGATCTTTACATGATC 540  
 QY 514 CTCAACAGCTTCATCATGCTCTCATATGACTGACTATGATGCTGCTTCATCCGCTCC 573  
 Db 541 CTCAACCTTTCTGTCGACACCGCTATGTACGATACATCTTCTCTCTCCAAAGGCTC 600  
 QY 574 ATGCGTCCCTACCTCTGTGTGAAAAAGTACATCACTCAAGGGCAGCTGTCAAGTTGTG 633  
 Db 601 GGGTTCGTAAGCCA--ATCAAGCCGTACATCAACCCCTTGATGACCCAGGCTTACG 657  
 QY 634 CTGAATATCATCCAGACACTGGGGGCTTCTGGCAATGCTCTTCCCTTCGGGTGG 693  
 Db 658 GCATGCTGTGTGACATCTTGTACGACTACCTTCCCATGCGATACCCACAGGCTCTT 717  
 QY 694 CTGTTCTTCCAGATTGATATGATATTTCCCTGATGCTCTCTTCAAACTTCAAT 753  
 Db 718 GTGCAAGCTTTCTTGAGTATCATATCACTGTGCTTCCCTTCGCAACTTTTGTG 777  
 QY 754 CAGACTTACAAACAGAA 770  
 Db 778 CAGAGCTATCTTAAAAA 794

RESULT 12  
 US-09-903-456-70  
 Sequence 70, Application US/09903456  
 Patent No. 6677145  
 GENERAL INFORMATION:  
 APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Leonard, Amanda Eun-Yeong  
 APPLICANT: Huang, Yung-Sheng

```

; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407.US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 70
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
; US-09-903-456-70

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Query Match      13.8%; Score 124.2; DB 4; Length 819;
Best Local Similarity 52.4%; Pred. No. 6.2e-29;
Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

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QY 157 ATGAAGAACCGGACCGCTTCTTGGCCGAGCATCTCGAGTTGATTAACCTTGACTC 216
DB 181 AACGAGATGAGAGACCTTTTGAGCTCAAGACCATCAAGCTTTCACAACTTGTTCTC 240
QY 217 ACCCTGCTCTCTACANGTTCATATGATGTGTGACAGGTGTGGAGGGAATAC 276
DB 241 TTGGACATTTCTTGTACATGTGCGTGGAGACCATCCGACGCTATCTTGAGAGCTAC 300
QY 277 AACTTTTTCGCCAGGGAACAGCAGCGCGGAGATCCGATATGAGATCAT--CCGC 333
DB 301 AAGGTGTGGAAGACAGATGAGAGAGGCAACGATCATGCTCAAGGATGCTCGC 360
QY 334 GTCTCTGTGTGACTTCTTCCAACTCATGATCATGAGAACCTTTTCTTCATC 393
DB 361 ATGTGTAGCGGCTTCTACGTGTCCAGGCAATCGAGTTCTTGATACCGCATATGATC 420
QY 394 CTTCGCAAGAACCAACACAGATCACCGTGTCCATGCTACACACGATACCATGCTC 453
DB 421 CTTTGCAGAGAGTTCAACAGGTTCTTCTTGCAATGTGTACACCAACATTTT 480
QY 454 AACATGTGTGTGTGTGATGAACGTGGGTTCCCTCGCGCATTCATATTTGTGACACA 513
DB 481 GCCATCTGTGGGCTATCCCAAGTAAGCCGACGAGGTGATGCGTACTTTTCAGTATC 540
QY 514 CTCACAGCTTCATCATGTCCTCATGTACTGTATGCTGTCTCTCATCCGCTCC 573
DB 541 CTCACCTCTTCTGTGACACCGTATGTCGATACCTTCTTCTCCCAAGGCTTC 600
QY 574 ATGCGTCCCTACCTCTGTGTGAAAAAGTACATCAAGGACAGCTGTGATGTG 633
DB 601 GGGTGTGTAAGC--CAATCAAGCGGTACATCAACCCCTTCAGATGACCAATCATG 657
QY 634 CTCACATATATCCAGACACCTCGCGGCTTCTGTGCAATGCTCTTCCCTGTGGGTG 693
DB 658 GCAATGCTGTGAGTCTGTGTACGACTACCTCTTCCATGAGATACCAAGGCTCTT 717
QY 694 CTGTCTTCAGATTGATATGATATTCCTGATGTGCTCTTTCACAACTTTCATAT 753
DB 718 GTGACGCTTGTGAGATGATATGATACCTTGTGCTTGTGCTTGTGGAATTTTGTG 777
QY 754 CAGACTTACACAGAA 770
DB 778 CAGAGCTATCTTAAAAA 794

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RESULT 13
US-09-903-456-72
; Sequence 72, Application US/09903456
; Patent No. 6677145
; GENERAL INFORMATION:

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; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407.US.P3
; CURRENT APPLICATION NUMBER: US/09/903,456
; PRIOR FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: US 09/624,670
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: US 09/379,095
; PRIOR FILING DATE: 1999-08-23
; PRIOR APPLICATION NUMBER: US 09/145,828
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 72
; LENGTH: 819
; TYPE: DNA
; ORGANISM: Thraustochytrium aureum
; US-09-903-456-72

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Query Match      13.8%; Score 124.2; DB 4; Length 819;
Best Local Similarity 52.4%; Pred. No. 6.2e-29;
Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

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QY 157 ATGAAGAACCGGACCGCTTCTTGGCCGAGCATCTCGAGTTGATTAACCTTGACTC 216
DB 181 AACGAGATGAGAGACCTTTTGAGCTCAAGACCATCAAGCTTTCACAACTTGTTCTC 240
QY 217 ACCCTGCTCTCTACATGTTCATATGATGTGTGACAGGTGTGGAGGGAATAC 276
DB 241 TTGGACATTTCTTGTACATGTGCGTGGAGACCATCCGACGCTATCTTGAGAGCTAC 300
QY 277 AACTTTTTCGCCAGGGAACAGCAGCGCGGAGATCCGATATGAGATCAT--CCGC 333
DB 301 AAGGTGTGGAAGACAGATGAGAGAGGCAACGATCATGCTCAAGGATGCTCGC 360
QY 334 GTCTCTGTGTGACTTCTTCCAACTCATGATCATGAGAACCTTTTCTTCATC 393
DB 361 ATGTGTAGGTGTGTACATGTGTCCAGGCAATCGAGTTCTTGATACCGCATATGATC 420
QY 394 CTTCGCAAGAACCAACACAGATCACCGTGTCCATGCTACACACGATACCATGCTC 453
DB 421 CTTTGCAGAGAGTTCAACAGGTTCTTCTTGCAATGTGTACACCAACATTTT 480
QY 454 AACATGTGTGTGTGTGATGAACGTGGGTTCCCTCGCGCATTCATATTTGTGACACA 513
DB 481 GCCATCTGTGGGCTATCCCAAGTAAGCCGACGAGGTGATGCGTACTTTTCAGTATC 540
QY 514 CTCACAGCTTCATCATGTCCTCATGTACTGTATGCTGTCTCTCATCCGCTCC 573
DB 541 CTCACCTCTTCTGTGACACCGTATGTCGATACCTTCTTCTCCCAAGGCTTC 600
QY 574 ATGCGTCCCTACCTCTGTGTGAAAAAGTACATCAAGGACAGCTGTGATGTG 633
DB 601 GGGTGTGTAAGC--ATCAAGCGGTACATCAACCCCTTCAGATGACCAATCATG 657
QY 634 CTCACATATATCCAGACACCTCGCGGCTTCTGTGCAATGCTCTTCCCTGTGGGTG 693
DB 658 GCAATGCTGTGAGTCTGTGTACGACTACCTCTTCCATGAGATACCAAGGCTCTT 717
QY 694 CTGTCTTCAGATTGATATGATATTCCTGATGTGCTCTTTCACAACTTTCATAT 753
DB 718 GTGACGCTTGTGAGTGTACATATACCTTGTGCTTGTGCTTGTGGAATTTTGTG 777
QY 754 CAGACTTACACAGAA 770
DB 778 CAGAGCTATCTTAAAAA 794

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RESULT 14

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US-09-903-456-73  
 ; Sequence 73, Application US/09903456  
 ; Patent No. 6677145  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407.US.P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; CURRENT FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1998-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 73  
 ; LENGTH: 819  
 ; TYPE: DNA  
 ; ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-73

Query Match 13.8%; Score 124.2; DB 4; Length 819;  
 Best Local Similarity 52.4%; Pred. No. 6.2e-29;  
 Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 157 ATGAAGAACCGGACCGCTTCTTGGCGAGGATCTGAGTTGATTAACCTTGACTC 216  
 DB 181 AAGAGATGAGAGAGCTTTGAGCTCAAGACATCAAGCTTGGACAACCTGTTCTC 240  
 QY 217 ACCCTGCTCTCTCTCAAGTTTATAGTGTGTGACAGGTGTGGAGGCAATAC 276  
 DB 241 TTGGACTTCTTGTACATGTGTGTGAGAGCAATCCGCGAGCTATCTCGAGGCTAC 300  
 QY 277 AACTTTTCTGCGAGGACACGCGCGGAGAAATCCGATATGAAGATCAT---CCGC 333  
 DB 301 AAAGTGTGGAACGACATGAGAGAGGCAAGAGTCTCATCTCAGGGCAATGTCTGC 360  
 QY 334 GTCTCTGTGTGTCTACTTCTTCCAAATCATGAAATTCATGACCTTTTCTTCAATC 393  
 DB 361 ATCGTGTACGTGTCTTCAAGTGTCCAGGATACAGATTTCTTGATACCGCATCATGATC 420  
 QY 394 CTTCGCAAGAACACACAGATCACCGTCTCATGTCTACACAGCTACCATGCTC 453  
 DB 421 CTTTGCAAGAGTTTCAACCAAGTTCCTTCTTGCAATGCAACCATGCAACATTTT 480  
 QY 454 AACATCTGTGTGTGTGTGATGAACTGGGTTCCCTGCGGCAATCATATTTTGGTGCACA 513  
 DB 481 GCCATCTGTGTGTGTGTGTGCAAGTACGCTTCCAGAGGTGATCGTACTTTTCAATGATC 540  
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 DB 541 CTCAACTCTTGTGTGCAACCGTATATGACATCACTTCTTCTTCTTCCCAAGGTTTC 600  
 QY 574 ATGGCTCCCTACTCTGTGTGAAAAAGTATACATCACTCAAGGAGCTGTGTCAAGTTTGTG 633  
 DB 601 GGGTGTGTGAAGCA---ATCAAGCGTATACATCAACCGTTCAATGACCAAGTTCAATG 657  
 QY 634 CTGACATCATCCAGAGAGCTGGGGGCTTCTTGCGCATGCTTCTTCCCTCTCGGGTGG 693  
 DB 658 GCAATGTCTGTGTGAGCTCTTGTATGACTTCTTCCAGTACACTTCCACCAAGGCTCTT 717  
 QY 694 CTGTTCTTCCAGATGTGATATGATTTCCGTGATGCTCTTCCCAAACTTCAAT 753  
 DB 718 GTGAGCTTCTTGTGAGTGTACATCACTTGTGCTTCTTCCGCAACTTTTGTG 777  
 QY 754 CAGACTTACCAACAGAA 770

DB 778 CAGAGTATCTTAAAAA 794

RESULT 15  
 US-09-903-456-74  
 ; Sequence 74, Application US/09903456  
 ; Patent No. 6677145  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407.US.P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; CURRENT FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1998-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 74  
 ; LENGTH: 819  
 ; TYPE: DNA  
 ; ORGANISM: *Thraustochytrium aureum*  
 US-09-903-456-74

Query Match 13.8%; Score 124.2; DB 4; Length 819;  
 Best Local Similarity 52.4%; Pred. No. 6.2e-29;  
 Matches 323; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 157 ATGAAGAACCGGACCGCTTCTTGGCGAGGATCTGAGTTGATTAACCTTGACTC 216  
 DB 181 AAGAGATGAGAGAGCTTTGAGCTCAAGACATCAAGCTTGGACAACCTGTTCTC 240  
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 QY 277 AACTTTTCTGCGAGGACACGCGCGGAGAAATCCGATATGAAGATCAT---CCGC 333  
 DB 301 AAAGTGTGGAACGACATGAGAGAGGCAAGAGTCTCATCTCAGGGCAATGTCTGC 360  
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 QY 574 ATGGCTCCCTACTCTGTGTGAAAAAGTATACATCACTCAAGGAGCTGTGTCAAGTTTGTG 633  
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Db 718 GTGAGCTTCTTGAGGTGACATGATCACTTGCCCTCTTGCGCACTTTTGTG 777  
OY 754 CAGACTTACACACAGAA 770  
Db 778 CAGAGCTATCTTAAAAA 794

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Job time : 82.4384 secs

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OM nucleic - nucleic search, using sw model

Run on: April 1, 2004, 08:25:38 / Search time 373.044 Seconds  
(without alignments)  
8811.868 Million cell updates/sec

Title: US-09-624-670-5

Perfect score: 879

Sequence: 1 atcgagcagctgagagcctt.....cgacacagagcctcaatga 879

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 2465228 seqs, 1869859620 residues 4930456

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications NA.\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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2	879	100.0	879	10	US-09-849-199A-22
3	879	100.0	879	14	US-10-120-637A-22
4	879	100.0	879	14	US-10-156-911-5
5	652.2	74.2	2426	14	US-10-198-846-1406
6	650.6	74.0	2340	12	US-10-058-270A-91
7	650.6	74.0	2340	12	US-10-342-887-1707
8	345	39.2	900	9	US-09-903-456-6
9	345	39.2	900	14	US-10-156-911-6
10	329	37.4	914	9	US-09-903-456-3
11	329	37.4	914	10	US-09-768-863-21
12	329	37.4	914	14	US-10-156-911-3
13	329	37.4	914	14	US-10-054-534B-21
14	329	37.4	914	14	US-10-408-736-3
15	329	37.4	914	14	US-10-431-952-21

16	327.2	37.2	1997	15	US-10-264-237-936	Sequence 936, App
17	258	29.4	748	9	US-09-764-868-352	Sequence 352, App
18	241	27.4	871	9	US-09-764-868-352	Sequence 352, App
19	177.6	20.2	1203	12	US-10-112-944-217	Sequence 217, App
20	177.6	20.2	2219	15	US-10-094-749-517	Sequence 517, App
21	132.4	15.1	24664	9	US-09-764-887-613	Sequence 613, App
22	132.4	15.1	24664	14	US-10-073-961-613	Sequence 613, App
23	131.4	14.9	2225	9	US-09-925-301-248	Sequence 248, App
24	119.4	13.6	430	10	US-09-918-995-17480	Sequence 17480, A
25	119.4	13.6	819	9	US-09-903-456-7	Sequence 7, Appl
26	119.4	13.6	819	9	US-10-156-911-7	Sequence 7, Appl
27	118.8	13.5	360	15	US-10-125-968-74	Sequence 74, Appl
28	117.8	13.4	819	9	US-09-903-456-70	Sequence 70, Appl
29	117.8	13.4	819	14	US-10-156-911-70	Sequence 70, Appl
30	117.8	13.4	3570	14	US-10-205-823-125	Sequence 125, App
31	116.2	13.2	818	9	US-09-903-456-71	Sequence 71, Appl
32	116.2	13.2	818	14	US-10-156-911-71	Sequence 71, Appl
33	116.2	13.2	819	9	US-09-903-456-69	Sequence 69, Appl
34	116.2	13.2	819	9	US-09-903-456-72	Sequence 72, Appl
35	116.2	13.2	819	9	US-09-903-456-73	Sequence 73, Appl
36	116.2	13.2	819	9	US-09-903-456-74	Sequence 74, Appl
37	116.2	13.2	819	14	US-10-156-911-69	Sequence 69, Appl
38	116.2	13.2	819	14	US-10-156-911-72	Sequence 72, Appl
39	116.2	13.2	819	14	US-10-156-911-73	Sequence 73, Appl
40	116.2	13.2	819	14	US-10-156-911-74	Sequence 74, Appl
41	116.2	13.2	819	14	US-10-060-793-28	Sequence 28, Appl
42	111.6	12.7	549	10	US-09-991-936-1727	Sequence 1727, Ap
43	108.6	12.4	834	10	US-09-918-995-37438	Sequence 37438, A
44	108	12.3	834	14	US-10-156-911-119	Sequence 119, App
45	108	12.3	834	14	US-10-156-911-120	Sequence 120, App

#### ALIGNMENTS

RESULT 1

US-09-903-456-5

Sequence 5, Application US/09903456

Patent No. US20020138874A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Leonard, Amanda Eun-yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407.US.P3

CURRENT APPLICATION NUMBER: US/09/903,456

CURRENT FILING DATE: 2001-07-11

PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 116

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 5

LENGTH: 879

TYPE: DNA

ORGANISM: Mus musculus

US-09-903-456-5

Query Match 100.0%; Score 879; DB 9; Length 879;

Best Local Similarity 100.0%; Pred. No. 6.6e-282;

Matches 879; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGCAGCTGAGAGCCTTGTATGATGAGTCATGCTTTTGGACATGTTTGA 60

DB 1 ATGAGCAGCTGAGAGCCTTGTATGATGAGTCATGCTTTTGGACATGTTTGA 60

QY 61 CCAAGATTCCTGAGTTGGCGGAGTGTCTCTGCTGACCTTTCACCTTATC 120

Db 61 CCAAGAGATTCGAGTTCGCGGGTGGTCTGCTGAGACTCTTCACTCCACCTTCATC 120  
 QY 121 CTCACCATCAGCTACCTGCTCTGATATGCTGGGTAAAGATCATGAAGAACGGCT 180  
 Db 121 CTCACCATCAGCTACCTGCTCTGATATGCTGGGTAAAGATCATGAAGAACGGCT 180  
 QY 181 GCTCTGCTCTCAGGGGATCTCTCACTTGTATTAACCTCGCATACACTTTCTTGGC 240  
 Db 181 GCTCTGCTCTCAGGGGATCTCTCACTTGTATTAACCTCGCATACACTTTCTTGGC 240  
 QY 241 TATATGCTGAGTCTGAGTCTCTCCAGCTGGGAAGGGTTCACTGCACTGAGTCA 300  
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 QY 361 TTCTCCAACTAGTGGAGTCTCTGACACGATTTCTTGTGTACGAAAAAGACCAAT 420  
 Db 361 TTCTCCAACTAGTGGAGTCTCTGACACGATTTCTTGTGTACGAAAAAGACCAAT 420  
 QY 421 CAGATCAGCTTCTCTCATGCTATCACACGCTGCAATGTCAATCTGTGGTGTAT 480  
 Db 421 CAGATCAGCTTCTCTCATGCTATCACACGCTGCAATGTCAATCTGTGGTGTAT 480  
 QY 481 TTGAACCTGATACCTTGTGTCAAAAGCTTTTGTGACCCACCTGAAACAGCTTATAC 540  
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 QY 541 ATTCTCATGTACTCTGCTACAGGCTGTGTGTCTCCGTCATGCAACAGTACCTTTGG 600  
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 QY 601 TGAAGAAAGTACCTCAACAGGCTGAGTGTGATCTGATCACTACAGCAACAG 660  
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 QY 781 CCAAGTGAAGAAAGAGCTGCAAGAAAGAAAGTGAAGTGTTCCTCCAAAGCCACTTA 840  
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 QY 841 ATTGTGGCTAATGGCATGACGGAACAAGAGGCTCAATTA 879  
 Db 841 ATTGTGGCTAATGGCATGACGGAACAAGAGGCTCAATTA 879

RESULT 2  
 US-09-849-199A-22  
 ; Sequence 22, Application US/09849199A  
 ; Publication No. US20030082754A1

## GENERAL INFORMATION:

; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradipt  
 ; APPLICANT: Thurmond, Jennifer M.  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Das, Tapas  
 ; TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES  
 ; FILE REFERENCE: 6804.US.01  
 ; CURRENT APPLICATION NUMBER: US/09/849,199A  
 ; NUMBER OF SEQ ID NOS: 38  
 ; SOFTWARE: FaastSeq for Windows Version 4.0  
 ; SEQ ID NO 22

; LENGTH: 879  
 ; TYPE: DNA  
 ; ORGANISM: Mus musculus  
 US-09-849-199A-22

Query Match 100.0%; Score 879; DB 10; Length 879;  
 Best Local Similarity 100.0%; Pred. No. 6,6e-282;  
 Matches 879; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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 Db 61 CCAAGAAATCTCAGAGTTCGCGGGTGGTCTCTGAGACTTTACCTTCCACTTCATC 120  
 QY 121 CTCACATCAAGTACTCTGCTCTGATATGCTGGGTAAAGAGTAAACATGAAGAACAGGCT 180  
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 QY 241 TATATGCTGAGTCTCATCTCTTCCAGCTGGGAAGAGTAAACATTCAGTGTAC 300  
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 QY 661 CTGAGTCCGCTGTGAAGCCCTGTGGCTTCCCTTTGGCTGTCTCATCTTCCAGTCTTC 720  
 Db 661 CTGAGTCCGCTGTGAAGCCCTGTGGCTTCCCTTTGGCTGTCTCATCTTCCAGTCTTC 720  
 QY 721 TATATGATGACCTGCTGATCTCTGTTCTTAACTTATTCAGATACCGGAAAAAG 780  
 Db 721 TATATGATGACCTGCTGATCTCTGTTCTTAACTTATTCAGATACCGGAAAAAG 780  
 QY 781 CCAAGTGAAGAAAGAGCTGCAAGAAAGAAAGTGAAGTGTTCCTCCAAAGCCACTTA 840  
 Db 781 CCAAGTGAAGAAAGAGCTGCAAGAAAGAAAGTGAAGTGTTCCTCCAAAGCCACTTA 840  
 QY 841 ATTGTGGCTAATGGCATGACGGAACAAGAGGCTCAATTA 879  
 Db 841 ATTGTGGCTAATGGCATGACGGAACAAGAGGCTCAATTA 879

RESULT 3  
 US-10-120-637A-22  
 ; Sequence 22, Application US/10120637A

Publication No. US20030134400A1  
 GENERAL INFORMATION:  
 APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Thurmond, Jennifer M.  
 APPLICANT: Huang, Yung-Sheng  
 APPLICANT: Das, Tapas  
 APPLICANT: Leonard, Amanda E.  
 APPLICANT: Pereira, Suzette L.  
 TITLE OF INVENTION: DELTA 4-DESATURASE GENES AND USES  
 FILE REFERENCE: 6804, US, P1  
 CURRENT APPLICATION NUMBER: US/10/120, 637A  
 CURRENT FILING DATE: 2002-04-11  
 PRIOR APPLICATION NUMBER: US 09/849,199  
 PRIOR FILING DATE: 2001-05-04  
 NUMBER OF SEQ ID NOS: 73  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO 22  
 LENGTH: 879  
 TYPE: DNA  
 ORGANISM: Mus musculus  
 US-10-120-637A-22

Query Match 100.0%; Score 879; DB 14; Length 879;  
 Best Local Similarity 100.0%; Pred. No. 6,6e-282;  
 Matches 879; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGCAGCTGGAAGGCGCTTGAATATGAAGTCAATGCTTCTTGGACAACTGTTTGA 60  
 DB 1 ATGAGCAGCTGGAAGGCGCTTGAATATGAAGTCAATGCTTCTTGGACAACTGTTTGA 60  
 QY 61 CCAGAGATTCTCGAGTTGCGGGTGGTCTCTGCTGGAAGCTTACCTCCACCTTCATC 120  
 DB 61 CCAGAGATTCTCGAGTTGCGGGTGGTCTCTGCTGGAAGCTTACCTCCACCTTCATC 120  
 QY 121 CTCACCATCAGTACCTGCTCTCGATATGCTGCGGTGAACAAGTACGAAGAAGCGCT 180  
 DB 121 CTCACCATCAGTACCTGCTCTCGATATGCTGCGGTGAACAAGTACGAAGAAGCGCT 180  
 QY 181 GCTGTGCTCAGGGGCGATCGCTGATATGCTGATATGCTGATATGCTGATATGCTGAT 240  
 DB 181 GCTGTGCTCAGGGGCGATCGCTGATATGCTGATATGCTGATATGCTGATATGCTGAT 240  
 QY 241 TATATGCTGATGAGTCTATCTCTCCAGCTGGAGAGAGATTAACTTGCAGTGTGAG 300  
 DB 241 TATATGCTGATGAGTCTATCTCTCCAGCTGGAGAGAGATTAACTTGCAGTGTGAG 300  
 QY 301 AATCTCGACAGTGCAGAGAGAGAGTGTCCGGGTAGCCAAAGTCTTGGTGGTACTAC 360  
 DB 301 AATCTCGACAGTGCAGAGAGAGAGTGTCCGGGTAGCCAAAGTCTTGGTGGTACTAC 360  
 QY 361 TTCTCCAACTAGTGAAGTCTCTGSAACAGATTTCTTGTCTTACGAAAAAAGCAAT 420  
 DB 361 TTCTCCAACTAGTGAAGTCTCTGSAACAGATTTCTTGTCTTACGAAAAAAGCAAT 420  
 QY 421 CAGATACCTTCTCTCATGTCTATACCAAGCGCTCAGTTCATCAATCTGGTGGTGT 480  
 DB 421 CAGATACCTTCTCTCATGTCTATACCAAGCGCTCAGTTCATCAATCTGGTGGTGT 480  
 QY 481 TTGAAGTGAATACCTGTGTGTCAGAGCTCTTGGACCAAGCTTGAACAGCTTATCCAG 540  
 DB 481 TTGAAGTGAATACCTGTGTGTCAGAGCTCTTGGACCAAGCTTGAACAGCTTATCCAG 540  
 QY 541 ATTCTCATGTACTCTTACTACAGGCTGTGTGTGTTCCTGTCATGCAAGTACTTGG 600  
 DB 541 ATTCTCATGTACTCTTACTACAGGCTGTGTGTGTTCCTGTCATGCAAGTACTTGG 600  
 QY 601 TGAAGAAGTACTTCAACAGGCTCAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660  
 DB 601 TGAAGAAGTACTTCAACAGGCTCAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660  
 QY 661 CTGAGTCCGCTGTGAAGCCTCTGAGCTTCCCTTTGGCTGTCTCATCTTCAGTCTTCC 720

DB 661 CTGAGTCCGCTGTGAAGCCTCTGAGCTTCCCTTTGGCTGTCTCATCTTCAGTCTTCC 720  
 QY 721 TATATGATGACGCTGTGTATCTCTGTTTAACTTCTATATTCACATACCGGAAAAAG 780  
 DB 721 TATATGATGACGCTGTGTATCTCTGTTTAACTTCTATATTCACATACCGGAAAAAG 780  
 QY 781 CCAAGTGAAGAGAGCTGCAAGAGAGAGATGTTTCCCAAGCCCACTTA 840  
 DB 781 CCAAGTGAAGAGAGCTGCAAGAGAGAGATGTTTCCCAAGCCCACTTA 840  
 QY 841 ATTGTGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 879  
 DB 841 ATTGTGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 879

RESULT 4  
 US-10-156-911-5  
 Sequence 5, Application US/10156911  
 Publication No. US20030163845A1

GENERAL INFORMATION:  
 APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Leonard, Amanda Eun-Yeong  
 APPLICANT: Huang, Yung-Sheng  
 APPLICANT: Pereira, Suzette L.  
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 FILE REFERENCE: 6407, US, P4  
 CURRENT APPLICATION NUMBER: US/10/156,911  
 CURRENT FILING DATE: 2002-10-01  
 PRIOR APPLICATION NUMBER: US 09/903,456  
 PRIOR FILING DATE: 2001-07-11  
 PRIOR APPLICATION NUMBER: US 09/624,670  
 PRIOR FILING DATE: 2000-07-24  
 PRIOR APPLICATION NUMBER: US 09/379,095  
 PRIOR FILING DATE: 1999-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 122  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO 5  
 LENGTH: 879  
 TYPE: DNA  
 ORGANISM: Mus musculus  
 US-10-156-911-5

Query Match 100.0%; Score 879; DB 14; Length 879;  
 Best Local Similarity 100.0%; Pred. No. 6,6e-282;  
 Matches 879; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGCAGCTGGAAGGCGCTTGAATATGAAGTCAATGCTTCTTGGACAACTGTTTGA 60  
 DB 1 ATGAGCAGCTGGAAGGCGCTTGAATATGAAGTCAATGCTTCTTGGACAACTGTTTGA 60  
 QY 61 CCAGAGATTCTCGAGTTGCGGGTGGTCTCTGCTGGAAGCTTACCTCCACCTTCATC 120  
 DB 61 CCAGAGATTCTCGAGTTGCGGGTGGTCTCTGCTGGAAGCTTACCTCCACCTTCATC 120  
 QY 121 CTCACCATCAGTACCTGCTCTCGATATGCTGCGGTGAACAAGTACGAAGAAGCGCT 180  
 DB 121 CTCACCATCAGTACCTGCTCTCGATATGCTGCGGTGAACAAGTACGAAGAAGCGCT 180  
 QY 181 GCTGTGCTCAGGGGCGATCGCTGATATGCTGATATGCTGATATGCTGATATGCTGAT 240  
 DB 181 GCTGTGCTCAGGGGCGATCGCTGATATGCTGATATGCTGATATGCTGATATGCTGAT 240  
 QY 241 TATATGCTGATGAGTCTATCTCTCCAGCTGGAGAGAGATTAACTTGCAGTGTGAG 300  
 DB 241 TATATGCTGATGAGTCTATCTCTCCAGCTGGAGAGAGATTAACTTGCAGTGTGAG 300  
 QY 301 AATCTCGACAGTGCAGAGAGAGTGTCCGGGTAGCCAAAGTCTTGGTGGTACTAC 360  
 DB 301 AATCTCGACAGTGCAGAGAGAGTGTCCGGGTAGCCAAAGTCTTGGTGGTACTAC 360



QY 361 TTCTCCAACTAGTGGAGTTCCTGACACAGATTTCTTGTCTACGAAAAAAGACCAAT 420  
 Db 361 TTCTCCAACTAGTGGAGTTCCTGACACAGATTTCTTGTCTACGAAAAAAGACCAAT 420  
 QY 421 CAGATCACCTTCCTTCAATGTCTATCAACAAGGCTCCATGTTCAACATGTGGTGTGT 480  
 Db 421 CAGATCACCTTCCTTCAATGTCTATCAACAAGGCTCCATGTTCAACATGTGGTGTGT 480  
 QY 481 TTGAACCTGATACCTTGTGTGTCAAAAGCTTTTGTGACCCACCCCTGAAGCTTTATCCAC 540  
 Db 481 TTGAACCTGATACCTTGTGTGTCAAAAGCTTTTGTGACCCACCCCTGAAGCTTTATCCAC 540  
 QY 541 ATTCTCATGTACTCTACTATCAAGGCTGTGTGTCCCTCCATGACAAAGTACTTTGG 600  
 Db 541 ATTCTCATGTACTCTACTATCAAGGCTGTGTGTCCCTCCATGACAAAGTACTTTGG 600  
 QY 601 TGGAAAGAGTACCTCAACAGGCTCAGCTGTGACATTCGTAACATACACGACGACG 660  
 Db 601 TGGAAAGAGTACCTCAACAGGCTCAGCTGTGACATTCGTAACATACACGACGACG 660  
 QY 661 CTGAGTCCCTGGTGAAGCCCTGTGCTCCCTTGGCTGTCTCATCTTCAGTCTTCC 720  
 Db 661 CTGAGTCCCTGGTGAAGCCCTGTGCTCCCTTGGCTGTCTCATCTTCAGTCTTCC 720  
 QY 721 TATATGATGACGCTGTGTCTATCTTAACTTCTATATTCAGACATACCGGAAAAAG 780  
 Db 721 TATATGATGACGCTGTGTCTATCTTAACTTCTATATTCAGACATACCGGAAAAAG 780  
 QY 781 CCGGTGAAGAAAGAGCTGCAAGAGAAAGAAAGTGGTCCCAAGCCCACTTA 840  
 Db 781 CCGGTGAAGAAAGAGCTGCAAGAGAAAGAAAGTGGTCCCAAGCCCACTTA 840  
 QY 841 ATTGTGCTATATGCAATGACGACGAAGAAAGGCTCATATA 879  
 Db 841 ATTGTGCTATATGCAATGACGACGAAGAAAGGCTCATATA 879

RESULT 5  
 US-10-198-846-13406  
 ; Sequence 13406, Application US/10198846  
 ; Publication No. US2003009974A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Lillie, James  
 ; APPLICANT: Xu, Youzhen  
 ; APPLICANT: Wang, Youzhen  
 ; APPLICANT: Steinmann, Kathleen  
 ; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS  
 ; TITLE OF INVENTION: FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND  
 ; FILE REFERENCE: MRI-049  
 ; CURRENT APPLICATION NUMBER: US/10/198, 846  
 ; PRIOR FILING DATE: 2002-07-18  
 ; PRIOR APPLICATION NUMBER: 60/306, 220  
 ; NUMBER OF SEQ ID NOS: 14084  
 ; SOFTWARE: Fast-Seq for Windows Version 4.0  
 ; SEQ ID NO 13406  
 ; LENGTH: 2426  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: misc feature  
 ; LOCATION: 1, 2425, 2426  
 ; OTHER INFORMATION: n = A,T,C or G  
 US-10-198-846-13406

Query Match 74.2%; Score 652.2; DB 14; Length 2426;  
 Best Local Similarity 84.3%; Prod. No. 5,7e-206;  
 Matches 751; Conservative 0; Mismatches 128; Indels 12; Gaps 1;

Db 85 ATGGAACATCTAAGGCCCTTGTATGATGAAATCAATGCTTTTGTGACAAATATGTTGA 144  
 QY 61 CCACGAGATTCTCGAGTTCGCGGGGTGTCTGCTGACCTTCACTTCCACCTTCATC 120  
 Db 145 CCGCGAGATTCTCGAGTTCGAGAGGTGTTCACGTTGACCTTCACTTCCACCTTTT 204  
 QY 121 CTCACATACCGTACCTCTCTCGATATAGCTGGGTAAACAATACATGAAGAACGGCT 180  
 Db 205 CTTACTGTATATCTCTCTCAATATAGCTGGGTAAACAATATATGAAGAACAGACT 264  
 QY 181 GCTTGTCTCTGAGGGGATCTCACTTGTATTAACCTCGAAATCAACTTCTTCCGC 240  
 Db 265 GCTTCTCTCTGAGGGATCTCACTTGTATTAACCTCGAAATCAACTTCTTCCGC 324  
 QY 241 TATATGCTGTGAGCTCATCTCTCCAGCTGGAGAGAGATTCAACTTGCAGTGTACG 300  
 Db 325 TACATGTGGAGAGACTCATCTCTCCAGCTGGAGAGAGATTCAACTTGCAGTGTACG 384  
 QY 301 AATCTGACAGTGCAGAGAAAGTATGTCCGGGTAGCCAAAGTCTTGTGTACTAC 360  
 Db 385 GATCTTACCGAGCGAGGGGAAAGCTGACATCCGGGTAGCCAAAGTCTTGTGTACTAT 444  
 QY 361 TTCTCCAACTAGTGGAGTTCCTGACACAGATTTCTTGTCTACGAAAAAAGACCAAT 420  
 Db 445 TTCTCCAACTAGTGGAGTTCCTGACACAGATTTCTTGTCTACGAAAAAAGACCAAT 504  
 QY 421 CAGATCACCTTCCTTCAATGTCTATCAACAAGGCTCCATGTTCAACATGTGGTGTGT 480  
 Db 505 CAGATCACCTTCCTTCAATGTCTATCAACAAGGCTCCATGTTCAACATGTGGTGTGT 564  
 QY 481 TTGAACCTGATACCTTGTGTGTCAAAAGCTTTTGTGACCCACCCCTGAAGCTTTATCCAC 540  
 Db 565 TTGAACCTGATACCTTGTGTGTCAAAAGCTTTTGTGACCCACCCCTGAAGCTTTATCCAC 624  
 QY 541 ATTCTCATGTACTCTACTATCAAGGCTGTGTGTCCCTCCATGACAAAGTACTTTGG 600  
 Db 625 ATTCTCATGTACTCTACTATCAAGGCTGTGTGTCCCTCCATGACAAAGTACTTTGG 684  
 QY 601 TGGAAAGAGTACCTCAACAGGCTCAGCTGTGACATTCGTAACATACACGACGACG 660  
 Db 685 TGGAAAGAGTACCTCAACAGGCTCAGCTGTGACATTCGTAACATACACGACGACG 744  
 QY 661 CTGAGTCCCTGGTGAAGCCCTGTGCTCCCTTGGCTGTCTCATCTTCAGTCTTCC 720  
 Db 745 ATGAGGCCGTGTGTAACCGTGTGCTTCCCTTGGCTGTCTCATCTTCAGTCTTCC 804  
 QY 721 TATATGATGACGCTGTGTCTATCTTAACTTCTATATTCAGACATACCGGAAAAAG 780  
 Db 805 TATATGCTAAGCTTATGATCTCTCTTAAATTTTATGTTCAGACATACCGGAAAAAG 864  
 QY 781 CCAATGAAGAAAGAGCTCAAGA-----GAAAGAGTGAAGATGTTTCC 828  
 Db 865 CCAATGAAGAAAGATGCAAGAGCCAGCTGAGGAAAGAGTGAAGATGTTTCC 924  
 QY 829 AAAGCCACTTATTTGTGCTAATGCAATGACGACGAAGAAAGGCTCATATA 879  
 Db 925 AAAGCCACTTATTTGTGCTAATGCAATGAGATGATGAAGAAAGCAATATA 975

RESULT 6  
 US-10-058-270A-91  
 ; Sequence 91, Application US/10058270A  
 ; Publication No. US20040029114A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Mack, David H.  
 ; APPLICANT: Afari, Daniel  
 ; APPLICANT: Afari, Daniel  
 ; APPLICANT: Eos Biotechnology, Inc.  
 ; TITLE OF INVENTION: Methods of Diagnosis of Breast Cancer, Compositions and  
 ; TITLE OF INVENTION: Methods of Screening for Modulators of Breast Cancer  
 ; FILE REFERENCE: 018501-005210US  
 ; CURRENT APPLICATION NUMBER: US/10/058, 270A  
 ; CURRENT FILING DATE: 2002-01-24

PRIOR APPLICATION NUMBER: US 60/263,965  
 PRIOR FILING DATE: 2001-01-24  
 PRIOR APPLICATION NUMBER: US 60/265,928  
 PRIOR FILING DATE: 2001-02-02  
 PRIOR APPLICATION NUMBER: US 09/829,472  
 PRIOR FILING DATE: 2001-04-09  
 PRIOR APPLICATION NUMBER: US 60/282,698  
 PRIOR FILING DATE: 2001-04-09  
 PRIOR APPLICATION NUMBER: US 60/288,590  
 PRIOR FILING DATE: 2001-05-04  
 PRIOR APPLICATION NUMBER: US 60/294,443  
 PRIOR FILING DATE: 2001-05-29  
 NUMBER OF SEQ ID NOS: 141  
 SOFTWARE: PatentIn Ver. 2.1  
 SEQ ID NO: 91  
 LENGTH: 2340  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-10-058-270A-91

Query Match 74.0%; Score 650.6; DB 12; Length 2340;

Best Local Similarity 84.2%; Pred. No. 1,9e-205;  
 Matches 750; Conservative 0; Mismatches 129; Indels 12; Gaps 1;

1 ATGAGCAGCTGAAGGCTTGATGATGAATGATGCTTTCTTGACACATGTTTGA 60  
 85 ATGGAACATCTAAGGCTTGATGATGAATGATGCTTTTGACACATGTTTGA 144  
 61 CCAGAGATTCTGAGTTCGGGGTGTCTCTGAGCTTACCTTCCACCTTCAAC 120  
 145 CCGGAGATTCTCAGTCAGAGGGTGTCTACGTTGACCTTACCTTCTACCTTTT 204  
 121 CTCACATCAGTACTGCTCTCGATATGAGTGGGTAAACAGTACAGTAAAGGCT 180  
 205 CTTACTGCAATGATCTGCTCTCAATGAGTGGGTAAACAGTACAGTAAAGGCT 264  
 181 GCTCTGCTCTCAGGGGCACTCTCACTTGTATACCTGCAATCACTTCTTTGCG 240  
 265 GCTCTTCTCTCAGGGGCACTCTCACTTGTATACCTGCAATCACTTCTTTGCG 324  
 241 TATATGCTGGTGGAGCTCATCTCTCAGCTGGAGAGAGGTAACTGACAGTGGAG 300  
 325 TACATGCTGGAGAGCTCATCTCTCAGCTGGAGAGAGGTAACTGACAGTGGAG 384  
 301 AATCTCAGCAGTGGAGAGAGGTGATGTCGGGTAGCCAGGCTTGTGTGATCTAC 360  
 385 GATCTTACAGCAGGAGGAGAGGTGATGTCGGGTAGCCAGGCTTGTGTGATCTAC 444  
 361 TTCTCCAACTAGTGGAGTTCCTGAGACAGATTTCTTTTCTTACGAAAAAAGCAAT 420  
 445 TTCTCCAACTAGTGGAGTTCCTGAGACAGATTTCTTTTCTTACGAAAAAAGCAAT 504  
 421 CAGATCACTCTCTTCACTGCTATCAACGCGCTCACTTCAACATCTGTGTGTGT 480  
 505 CAGATCACTCTCTTCACTGCTATCAACGCGCTCACTTCAACATCTGTGTGTGT 564  
 481 TTGAACGTGATACCTTGTGTCAAAAGCTTCTTGGACCACTTGAACAGCTTATCAC 540  
 565 TTGAACGTGATACCTTGTGTCAAAAGCTTCTTGGACCACTTGAACAGCTTATCAC 624  
 541 AATTCATGTAAGTCTCTTCACTGCTATCAACGCGCTCACTTCAACATCTGTGTGTGT 600  
 625 AATTCATGTAAGTCTCTTCACTGCTATCAACGCGCTCACTTCAACATCTGTGTGTGT 684  
 601 TGAAGAAAGTACCTTCACTGCTATCAACGCGCTCACTTCAACATCTGTGTGTGTGT 660  
 685 TGAAGAAAGTACCTTCACTGCTATCAACGCGCTCACTTCAACATCTGTGTGTGTGT 744  
 661 CTGAGTGGCTGTGGAGGCTCTGTGGCTTCCCTTGGCTGTGTGTGTGTGTGTGTGT 720  
 745 ATGAGCGCTGTGGAGGCTCTGTGGCTTCCCTTGGCTGTGTGTGTGTGTGTGTGT 804  
 721 TATATGATGACGCTGATCTCTGTCTTAACTTCTATATGACATACCGGAAAAAG 780

DB 805 TATATGCTAAGTATCTATCTCTCTTAAATTTTATGTTTCAACATACCGAAAAAG 864  
 QY 781 CCAGTGAAGAAAGAGCTGCAAG------GAAAGAGTGAAGATGTTTCCC 828  
 DB 865 CCAATGAAGAAAGATATGCAAGAGCCAGCTGAGGAGAAAGAGTGAAGATGTTTCC 924  
 QY 829 AAGGCCACTTATATGCTATGAGCATGAGGACCAAGAGGCTCAATTA 879  
 DB 925 AAGGCTTACTTCACTGAGAAATGAGTGAATGAACAGAACCAATTA 975

# RESULT 7

US-10-342-887-1707  
 Sequence 1707, Application US/10342887  
 Publication No. US20040058340A1

## GENERAL INFORMATION:

APPLICANT: Dai, Hongyue  
 APPLICANT: He, Yudong  
 APPLICANT: Linsley, Peter S.

APPLICANT: Mao, Mao  
 APPLICANT: Roberts, Christopher J.  
 APPLICANT: Van de Vijver, Laura Johanna  
 APPLICANT: Van de Vijver, Marc J.

TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients  
 FILE REFERENCE: 9301-188-999  
 CURRENT APPLICATION NUMBER: US/10/342,887

PRIOR FILING DATE: 2003-01-15  
 PRIOR APPLICATION NUMBER: 60/298,918  
 PRIOR FILING DATE: 2001-06-18  
 PRIOR APPLICATION NUMBER: 60/380,710

PRIOR FILING DATE: 2002-05-14  
 PRIOR APPLICATION NUMBER: 10/172,118  
 PRIOR FILING DATE: 2002-06-14

NUMBER OF SEQ ID NOS: 2659  
 SEQ ID NO 1707

LENGTH: 2340  
 TYPE: DNA

ORGANISM: Homo sapiens  
 US-10-342-887-1707

Query Match 74.0%; Score 650.6; DB 12; Length 2340;  
 Best Local Similarity 84.2%; Pred. No. 1,9e-205;  
 Matches 750; Conservative 0; Mismatches 129; Indels 12; Gaps 1;

1 ATGAGCAGCTGAAGGCTTGATGATGAATGATGCTTTCTTGACACATGTTTGA 60  
 85 ATGGAACATCTAAGGCTTGATGATGAATGATGCTTTTGACACATGTTTGA 144  
 61 CCAGAGATTCTGAGTTCGGGGTGTCTCTGAGCTTACCTTCCACCTTCAATC 120  
 145 CCGGAGATTCTCAGTCAGAGGGTGTCTACGTTGACCTTACCTTCTACCTTTT 204  
 121 CTCACATCAGTACTGCTCTCGATATGAGTGGGTAAACAGTACAGTAAAGGCT 180  
 205 CTTACTGCAATGATCTGCTCTCAATGAGTGGGTAAACAGTACAGTAAAGGCT 264  
 181 GCTCTGCTCTCAGGGGCACTCTCACTTGTATACCTGCAATCACTTCTTTGCG 240  
 265 GCTCTTCTCTCAGGGGCACTCTCACTTGTATACCTGCAATCACTTCTTTGCG 324  
 241 TATATGCTGGTGGAGTCTATCTCTCAGCTGGAGAGAGGTAACTGACAGTGGAG 300  
 325 TACATGCTGGAGAGTCTATCTCTCAGCTGGAGAGAGGTAACTGACAGTGGAG 384  
 301 AATCTCAGCAGTGGAGAGAGGTGATGTCGGGTAGCCAGGCTTGTGTGATCTAC 360  
 385 GATCTTACAGCAGGAGGAGAGGTGATGTCGGGTAGCCAGGCTTGTGTGATCTAC 444  
 361 TTCTCCAACTAGTGGAGTTCCTGAGACAGATTTCTTTTCTTACGAAAAAAGCAAT 420  
 445 TTCTCCAACTAGTGGAGTTCCTGAGACAGATTTCTTTTCTTACGAAAAAAGCAAT 504

QY 421 CAGATACCTTCTTATGATCTATGACAGGCGTCCATGTTCAACATCTGGGGTGT 480  
DB 505 CAAATTAATCTTTTATATATATATATATATATATATATATATATATATATAT 564  
QY 481 TTGAATGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATAT 540  
DB 565 TTGAATGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATAT 624  
QY 541 ATCTCATGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATAT 600  
DB 625 ATCTCATGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATAT 684  
QY 601 TGAAGAGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATAT 660  
DB 685 TGAAGAGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATAT 744  
QY 661 CTGATGATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 720  
DB 745 ATGAGGCGCTTCTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 804  
QY 721 TATATGATGATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATAT 780  
DB 805 TATATGATGATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 864  
QY 781 CCAATGATGATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 828  
DB 865 CCAATGATGATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 924  
QY 829 AAAGCCCACTTATTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 879  
DB 925 AAAGCCCACTTATTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 975

## RESULT 8

US-09-903-456-6  
Sequence 6, Application US/09903456  
Patent No. US20020138874A1  
GENERAL INFORMATION:  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradipt  
APPLICANT: Leonard, Amanda Eun-Yeong  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Pereira, Suzette L.  
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
FILE REFERENCE: 6407.US.P3  
CURRENT FILING DATE: 2001-07-11  
CURRENT APPLICATION NUMBER: US/09/903,456  
PRIOR FILING DATE: 2000-07-24  
PRIOR APPLICATION NUMBER: US 09/624,670  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: US 09/145,828  
NUMBER OF SEQ ID NOS: 116  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 6  
LENGTH: 900  
TYPE: DNA  
ORGANISM: Mus musculus  
US-09-903-456-6

Query Match 39.2%; Score 345; DB 9; Length 900;  
Best Local Similarity 65.8%; Pred. No. 8.7e-104;  
Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;  
QY 19 TTGATATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 78  
DB 10 TTGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 69  
QY 79 CGGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 138  
DB 70 AAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 129

QY 139 CTCTGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 198  
DB 130 CTCTGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 189  
QY 199 ATCTCATGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATAT 258  
DB 190 ATCTCATGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 249  
QY 259 ATCTCATGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 318  
DB 250 ATCTCATGATATCTTTGATGATCAAGCTTTTGAACCCAGCTGATATATATATAT 309  
QY 319 GAAGTATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 378  
DB 310 GAAGTATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 369  
QY 379 TTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 438  
DB 370 TTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 429  
QY 439 GTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 498  
DB 430 GTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 489  
QY 499 GGTCAAGCTTTTGAACCCAGCTGATATATATATATATATATATATATATATAT 558  
DB 490 GGTCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 549  
QY 559 TACGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 618  
DB 550 TACGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 609  
QY 619 CAGGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 678  
DB 610 CAGGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 669  
QY 679 CCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 738  
DB 670 CCTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 729  
QY 739 ATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 799  
DB 730 ATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 770

## RESULT 9

US-10-156-911-6  
Sequence 6, Application US/10156911  
Publication No. US20030163845A1  
GENERAL INFORMATION:  
APPLICANT: Abbott Laboratories  
APPLICANT: Mukerji, Pradipt  
APPLICANT: Leonard, Amanda Eun-Yeong  
APPLICANT: Huang, Yung-Sheng  
APPLICANT: Pereira, Suzette L.  
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
FILE REFERENCE: 6407.US.P4  
CURRENT FILING DATE: 2002-10-01  
CURRENT APPLICATION NUMBER: US/10/156,911  
PRIOR FILING DATE: 2001-07-11  
PRIOR APPLICATION NUMBER: US 09/903,456  
PRIOR FILING DATE: 2000-07-24  
PRIOR APPLICATION NUMBER: US 09/624,670  
PRIOR FILING DATE: 1999-08-23  
PRIOR APPLICATION NUMBER: US 09/145,828  
NUMBER OF SEQ ID NOS: 122  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 6  
LENGTH: 900  
TYPE: DNA

ORGANISM: Mus musculus  
US-10-156-911-6

Query Match 39.2%; Score 345; DB 14; Length 900;  
Best Local Similarity 65.8%; Pred. No. 8,7e-104;  
Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;

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QY 19 TTGATTAATGAGTCAATGCTTTCTTGAGACAATGTTGGACCAAGATTCTGAGTT 78
DB 10 TTGATGATGATCACTGATACCTTATTTCAAGGCTTCTGGGCCCCCGAGATCAAGAGTC 69
QY 79 CGGGGGGTTCCTCGCTGAGCTGTAACCTTCCACCTTCACTCCACCAATCAGTACCTG 138
DB 70 AAAGATGTTCTCTCTCGAGCAATTAATACCTTCAAGCTTGTCTGTATTTACTTA 129
QY 139 CTCTGATATGCTGAGTAAAGTACATGATAGAGAGGCTGCTCTCTCTCAAGGAGC 198
DB 130 CTGATGATGAGGCTGGAGCAAAATATGATGAAACCGGAGGCTCTCTTCCGAGGC 189
QY 199 ATCTTCACTTGTATTAACCTGCAATCACTTTCTTGCGTATATGCTGTGAGCTC 258
DB 190 ATCTTCACTTGTATTAACCTGCAATCACTTTCTCTCTCTCTCTCTCTCTCTCTCT 249
QY 259 ATCTTCACTTGTATTAACCTGCAATCACTTTCTCTCTCTCTCTCTCTCTCTCTCT 318
DB 250 GTGACAGGTGTGAGGAGGAGCAATACATTTTCTTCCAGGAGAGAGAGAGAGAGAG 309
QY 319 GAAAGTATGCTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 378
DB 310 GAATCCGATTAAGAGATCACTCCGAGTCTGTGTGATCACTTCCAAATCAATCGAA 369
QY 379 TTCTGAGACAGATTTTCTTGTTCACGAAAACCAATCAATCACTTCTCTCTCTCT 438
DB 370 TTCTGAGACAGATTTTCTTGTTCACGAAAACCAATCAATCACTTCTCTCTCTCT 429
QY 439 GTCTATACACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 498
DB 430 GTCTATACACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 489
QY 499 GGTCAAAAGCTTTTGGAGCCAGCTTGAACAGCTTTATCACTTCTCTCTCTCTCT 558
DB 490 GGTCAAAAGCTTTTGGAGCCAGCTTGAACAGCTTTATCACTTCTCTCTCTCTCT 549
QY 559 TAGGCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 618
DB 550 TAGGCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 609
QY 619 CAGGCTCAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 678
DB 610 CAGGCTCAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 669
QY 679 CCTGTGAGCTTCCCTTGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 738
DB 670 CCTGTGAGCTTCCCTTGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 729
QY 739 ATCTGTCTTAACTTCTATATTCAGACATACCGAGAAA 779
DB 730 GCTCTTCAAACTTCTATATTCAGACATACCGAGAAA 770
```

RESULT 10  
US-09-903-456-3

Sequence 3, Application US/09903456  
Patent No. US20020138874A1

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Leonard, Amanda Eun-Yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzete L.

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407, US, P3

CURRENT APPLICATION NUMBER: US/09/903,456

CURRENT FILING DATE: 2001-07-11  
PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 116

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3

LENGTH: 914

TYPE: DNA

ORGANISM: Homo sapiens

US-09-903-456-3  
Query Match 37.4%; Score 329; DB 9; Length 914;  
Best Local Similarity 64.5%; Pred. No. 1.9e-98;  
Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

```
QY 19 TTGATTAATGAGTCAATGCTTTCTTGAGACAATGTTGGACCAAGATTCTGAGTT 78
DB 10 TTGATGATGATCACTGATACCTTATTTCAAGGCTTCTGGGCCCCCGAGATCAAGAGTC 69
QY 79 CGGGGGGTTCCTCGCTGAGCTGTAACCTTCCACCTTCACTCCACCAATCAGTACCTG 138
DB 70 AAAGATGTTCTCTCTCGAGCAATTAATACCTTCAAGCTTGTCTGTATTTACTTA 129
QY 139 CTCTGATATGCTGAGTAAAGTACATGATAGAGAGGCTGCTCTCTCTCAAGGAGC 198
DB 130 CTGATGATGAGGCTGGAGCAAAATATGATGAAACCGGAGGCTCTCTTCCGAGGC 189
QY 199 ATCTTCACTTGTATTAACCTGCAATCACTTTCTTGCGTATATGCTGTGAGCTC 258
DB 190 ATCTTCACTTGTATTAACCTGCAATCACTTTCTCTCTCTCTCTCTCTCTCTCTCT 249
QY 259 ATCTTCACTTGTATTAACCTGCAATCACTTTCTCTCTCTCTCTCTCTCTCTCTCT 318
DB 250 GTGACAGGTGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 309
QY 319 GAAAGTATGCTGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 378
DB 310 GAATCCGATTAAGAGATCACTCCGAGTCTGTGTGATCACTTCCAAATCAATCGAA 369
QY 379 TTCTGAGACAGATTTTCTTGTTCACGAAAACCAATCAATCACTTCTCTCTCTCT 438
DB 370 TTCTGAGACAGATTTTCTTGTTCACGAAAACCAATCAATCACTTCTCTCTCTCT 429
QY 439 GTCTATACACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 498
DB 430 GTCTATACACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 489
QY 499 GGTCAAAAGCTTTTGGAGCCAGCTTGAACAGCTTTATCACTTCTCTCTCTCTCT 558
DB 490 GGTCAAAAGCTTTTGGAGCCAGCTTGAACAGCTTTATCACTTCTCTCTCTCTCT 549
QY 559 TAGGCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 618
DB 550 TAGGCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 609
QY 619 CAGGCTCAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 678
DB 610 CAGGCTCAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 669
QY 679 CCTGTGAGCTTCCCTTGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 738
DB 670 CCTGTGAGCTTCCCTTGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 729
QY 739 ATCTGTCTTAACTTCTATATTCAGACATACCGAGAAA 779
DB 730 GCTCTTCAAACTTCTATATTCAGACATACCGAGAAA 770
```

RESULT 11

US-09-769-863-21  
 ; Sequence 21, Application US/09769863  
 ; Publication No. US20030157144A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Das, Tapas  
 ; APPLICANT: Thurmond, Jennifer  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6763 US 01  
 ; CURRENT APPLICATION NUMBER: US/09/769,863  
 ; CURRENT FILING DATE: 2001-01-25  
 ; NUMBER OF SEQ ID NOS: 32  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 21  
 ; LENGTH: 914  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; US-09-769-863-21

Query Match 37.4%; Score 329; DB 10; Length 914;

Best Local Similarity 64.5%; Pred. No. 1,9e-98;  
 Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

QY 19 TTTGATTAATGAAGTCATGCTTTCTTGACAAATGTTGGACGAGATTCGAGTT 78  
 DB 10 TTTGATGATCACTAGTACTATTTCAGGCACTGAGCCCTCGAGATCTAGAGTA 69  
 QY 79 CCGGGGTGCTTCTGCTGACCTTACCTCCCACTTCACTCAGCAGTACAGTACCTG 138  
 DB 70 AAAGATGATTTCTTCTGACCAATTATATACCACTTATCTGCTGCTATATTTTA 129  
 QY 139 CTCTGATATGCTGGGTACAGTACATGAAGAACAGCCCTGCTCTCTCAGGGGC 198  
 DB 130 CTATATGATGCTGGGACCAAAATACATGAGATAAACAAGCATTCCTGCGGGGG 189  
 QY 199 ATCTCAGCTTGTATATACCTGCAATACACTCTTCTTGGCTATATGCTGGAGACT 258  
 DB 190 ATTTTATGATGATATATACCTTGTGACACACTGCTGCTGATATGTTCTGTAGATTA 249  
 QY 259 ATCCCTCCAGCGGGAAGAGATTAACAATGTCAGATGTCAGAAATCTGCAAGTGAAGA 318  
 DB 250 GTATAGAGATATGGAAGGCAAAATACATCTTCTCTGAGGCAACGACGAGGA 309  
 QY 319 GAAGTGAATGCCGGGTAGCAAGGCTTGTGTGTGATCTACTTCTCAAATGAGGAG 378  
 DB 310 GAATCAGATATGAAGATATATCCGTGCTCTGTGTGTGATCTTCTCAAATGATGAA 359  
 QY 379 TTCTGAGACAGATTTCTTTTGTCTAGGAAAAAAGACATCGATGATCACTTCTCAT 438  
 DB 370 TTATAGACACTTCTTCTTCACTCTGGCAAGAAACAACAGATGAGGCTCTCAC 429  
 QY 439 GTCTATACACAGCGCTCATGTTCAACAATCTGTGTGTGTGTGTGAATGATCACTTGT 498  
 DB 430 GTTATACACAGCGCTCATGTTCAACAATCTGTGTGTGTGTGTGAATGATCACTTGT 489  
 QY 499 GGTCAAAGCTTCTTTGAGACCACTGTAAGAGCTTATCAATTTCTATATCTTCTAC 558  
 DB 490 GGGCACTCTTATTTGT 539  
 QY 559 TACGCGCTGT 618  
 DB 550 TATGTTGT 609  
 QY 619 CAGGCTCAGCTGT 678  
 DB 610 CAGGGGACCTGT 669  
 QY 679 CCTGT 728  
 DB 670 CCTGT 729

QY 729 ATCTGTTCTTAACCTTCTATATTCAGACATACCGGAAAAA 779  
 DB 730 GCTCTCTTCAAACTTCTATTCAGACTTAAACAGAA 770

RESULT 12

US-10-156-911-3

; Sequence 3, Application US/10156911

; Publication No. US20030163845A1

; GENERAL INFORMATION:

; APPLICANT: Abbott Laboratories

; APPLICANT: Mukerji, Pradip

; APPLICANT: Leonard, Amanda Eun-Yeong

; APPLICANT: Huang, Yung-Sheng

; APPLICANT: Pereira, Suzette L.

; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

; FILE REFERENCE: 6407 US P4

; CURRENT APPLICATION NUMBER: US/10/156,911

; CURRENT FILING DATE: 2002-10-01

; PRIOR APPLICATION NUMBER: US 09/903,456

; PRIOR FILING DATE: 2001-07-11

; PRIOR APPLICATION NUMBER: US 09/624,670

; PRIOR FILING DATE: 2000-07-24

; PRIOR APPLICATION NUMBER: US 09/379,095

; PRIOR FILING DATE: 1999-08-23

; PRIOR APPLICATION NUMBER: US 09/145,828

; PRIOR FILING DATE: 1998-09-02

; NUMBER OF SEQ ID NOS: 122

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 3

; LENGTH: 914

; TYPE: DNA

; ORGANISM: Homo sapiens

; US-10-156-911-3

Query Match 37.4%; Score 329; DB 14; Length 914;

Best Local Similarity 64.5%; Pred. No. 1,9e-98;  
 Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

QY 19 TTTGATTAATGAAGTCATGCTTTCTTGACAAATGTTGGACGAGATTCGAGTT 78  
 DB 10 TTTGATGATCACTAGTACTATTTCAGGCACTGAGCCCTCGAGATCTAGAGTA 69  
 QY 79 CCGGGGTGCTTCTGCTGACCTTACCTCCCACTTCACTCAGCAGTACAGTACCTG 138  
 DB 70 AAAGATGATTTCTTCTGACCAATTATATACCACTTATCTGCTGCTATATTTTA 129  
 QY 139 CTCTGATATGCTGGGTACAGTACATGAAGAACAGCCCTGCTCTCTCAGGGGC 198  
 DB 130 CTATATGATGCTGGGACCAAAATACATGAGATAAACAAGCATTCCTTCCGGGGG 189  
 QY 199 ATCTCAGCTTGTATATACCTGCAATACACTCTTCTTGGCTATATGCTGGAGACT 258  
 DB 190 ATTTTATGATGATATATACCTTGTGACACACTGCTGCTGATATGTTCTGTAGATTA 249  
 QY 259 ATCCCTCCAGCTGGAAGAGATTAACAATGTCAGATGTCAGAAATCTGCAAGTGAAGA 318  
 DB 250 GTATAGAGATATGGAAGGCAAAATACATCTTCTCTGAGGCAACGACGAGGA 309  
 QY 319 GAAGTGAATGCCGGGTAGCAAGGCTTGTGTGTGATCTACTTCTCAAATGAGGAG 378  
 DB 310 GAATCAGATATGAAGATATATCCGTGCTCTGTGTGTGTGTGTGTGTGTGTGTGTGT 369  
 QY 379 TTCTGAGACAGATTTCTTTTGTCTAGGAAAAAAGACATCGATGATCACTTCTCAT 438  
 DB 370 TTATAGACACTTCTTCTTCACTCTGGCAAGAAACAACAGATGAGGCTCTCAC 429  
 QY 439 GTCTATACCAAGCGCTCATGTTCAACAATCTGTGTGTGTGTGTGTGTGTGTGTGTGT 498  
 DB 430 GTTATACCAAGCGCTCATGTTCAACAATCTGTGTGTGTGTGTGTGTGTGTGTGTGT 489  
 QY 499 GGTCAAAGCTTCTTTGAGACCACTGTAAGAGCTTATCAATTTCTATATCTTCTAC 558

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Db      490 GGGCACTATTATTTGGTGCACACTTAATAGCTTATCCAGTCTCTATGACTCTTAC 543
Qy      559 TACGACCTGTCTGTGTCCGTCATGCACAAAGTACCTTTGGTGAAGAAGTACTCA 618
Db      550 TATGTTTGTGTGAGTCCCTTCATGCGTCCATACCTCTGGTGAAGAAGTACTCA 609
Qy      619 CAGGCTCAGCTGTGTGAGTGTCTATCATCATCAGCACAAGCTGTAGTCCCTGTGAAG 678
Db      610 CAGGGGAGCTGTCTGAGTTGTGTGCTGACAAATCATCCAGCAGCTGCGGGGTCACTGG 669
Qy      679 CCCGTGAGCTTCCCTTGGCTGTCTCATCTTCAGTCTTCCATATGATGACGCTGATC 738
Db      670 CCGTGACATTCCTCTGTGTGTGTGTATTTCCAGATGGATGATATTTCCCTGAT 729
Qy      739 ATCCTGTTCTTAACTTCTATATTCAGACATACCGGAAAA 779
Db      730 GCTCTCTTCAAACTTCTATCATTCAGACCTTACACAGAGA 770

```

## RESULT 13

```

US-10-054-534B-21
; Sequence 21, Application US/10054534B
; Publication No. US20030167525A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Das, Tapas
; APPLICANT: Thurmond, Jennifer M.
; APPLICANT: Pereira, Suzette L.
; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF
; FILE REFERENCE: 6763 US. P1
; CURRENT FILING DATE: 2002-01-22
; PRIOR FILING DATE: 2001-01-25
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 914
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-054-534B-21

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```

Query Match      37.4%; Score 329; DB 14; Length 914;
Best Local Similarity 64.5%; Pred. No. 1.9e-98;
Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

```

```

Qy      19 TTGATATGAAGTCAATGCTTCTTGACAAATGTTTGACACAGAGATTCGAGTT 78
Db      10 TTGATGATCATCTTACTTACTTTCAGGATGTTAGCCCTGAGATTAAGTA 69
Qy      79 GCGGGGTGTTCTGTGCTGACTTTACCTTCCACCTTACTCTCAGCATCAGTACCTG 138
Db      70 AAAGGATGTTTCTTCTGACAAATTAATACCCCAATTAATGCTCTGTGCAATATTA 129
Qy      139 CTCTCGATATGCTGCTGATACAGATCAATGAAGAGAGAGAGAGAGAGAGAGAG 198
Db      130 CTAAATTTATGCTGTGGACCAAAATACATGAGAAATTAACAGCATTCCTTTCGCGGG 189
Qy      199 ATCTCAGCTTGTATTAACCTGCAATCAGCTTCTTCTGATATGATGCTGTGAGCTC 258
Db      190 ATTTAGTGTGTATTAACCTTGTGACATCAGCTGCTGTCTGTATATGTTCTGTGAGTTA 249
Qy      259 ATCTCTCCAGCTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 318
Db      250 GTPAAGAGATATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 309
Qy      319 GAAGTGTATGCTGGGTAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 378
Db      310 GAATGATATGAATATATCGGTCTCTGTGTGTGTATCTTCTCAAACTCATAGAA 369

```

```

Qy      379 TTCTGGACACGATTTTCTTGTCTACGAAAAAGACAAATCAGATCAGCTTCTTCA 438
Db      370 TTATGAGACACTTCTTCTTCACTCCGACAGAAACACACGATACAGGTCTGTGAC 429
Qy      439 GTCTATCACACGCGTCAATGTTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGT 498
Db      430 GTCTACACCATCTCTGATGTGAAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGT 489
Qy      499 GGTCAAGCTTCTTGTGACCAACCTGAAACAGCTTATTCACATCTCATATGATACCTTAC 558
Db      490 GGGCACTATTATTTGGTGCACACTTAATAGCTTATCCAGTCTCTATGACTCTTAC 549
Qy      559 TACGACCTGTCTGTGTCCGTCATGCACAAAGTACCTTTGGTGAAGAAGTACTCA 618
Db      550 TATGTTTGTGTGAGTCCCTTCATGCGTCCATACCTCTGGTGAAGAAGTACTCA 609
Qy      619 CAGGCTCAGCTGTGTGAGTGTCTATCATCATCAGCACAAGCTGTAGTCCCTGTGAAG 678
Db      610 CAGGGGAGCTGTCTGAGTTGTGTGCTGACAAATCATCCAGCAGCTGCGGGGTCACTGG 669
Qy      679 CCCGTGAGCTTCCCTTGGCTGTCTCATCTTCAGTCTTCCATATGATGACGCTGATC 738
Db      670 CCGTGACATTCCTCTGTGTGTGTGTATTTCCAGATGGATGATATTTCCCTGAT 729
Qy      739 ATCCTGTTCTTAACTTCTATATTCAGACATACCGGAAAA 779
Db      730 GCTCTCTTCAAACTTCTATCATTCAGACCTTACACAGAGA 770

```

## RESULT 14

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US-10-408-736-3
; Sequence 3, Application US/10408736
; Publication No. US20030177508A1
; GENERAL INFORMATION:
; APPLICANT: Abbott Laboratories
; APPLICANT: Mukerji, Pradip
; APPLICANT: Das, Tapas
; APPLICANT: Huang, Yung-Sheng
; APPLICANT: Parker-Barnes, Jennifer M.
; APPLICANT: Leonard, Amanda Eun-Yeong
; APPLICANT: Thurmond, Jennifer M.
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
; FILE REFERENCE: 6407 US. P1
; CURRENT FILING DATE: 2003-04-04
; PRIOR FILING DATE: 2003-04-04
; PRIOR FILING DATE: 1999-08-23
; PRIOR FILING DATE: 1998-09-02
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 914
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-408-736-3

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```

Query Match      37.4%; Score 329; DB 14; Length 914;
Best Local Similarity 64.5%; Pred. No. 1.9e-98;
Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

```

```

Qy      19 TTGATATGAAGTCAATGCTTCTTGACAAATGTTTGACACAGAGATTCGAGTT 78
Db      10 TTGATGATCATCTTACTTACTTTCAGGATGTTAGCCCTGAGATTAAGTA 69
Qy      79 GCGGGGTGTTCTGTGCTGACTTTTACCTTCCACCTTACTCTCAGCATCAGTACCTG 138
Db      70 AAAGGATGTTTCTTCTGACAAATTAATACCCCAATTAATGCTCTGTGCAATATTA 129
Qy      139 CTCTCGATATGCTGCTGATACAGATCAATGAAGAGAGAGAGAGAGAGAGAGAGAGAG 198
Db      130 CTAAATTTATGCTGTGGACCAAAATACATGAGAAATTAACAGCATTCCTTTCGCGGG 189

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QY	199	ATCCTCACCTTGATATACCTCGGAATCAACAGCTCTCTTCGCGGTATATAGCTGAGACTC	258
Db	190	ATTTTAGTGGTGTATTAACCTTGGACCTCGACCTGCTGTCTCTGTATATGTTCTGAGTTA	249
QY	259	ATCCTTCACGCTGGAGAGAGATTACAACTTGACAGTGCATGCAATCTGACAGTGCAGA	318
Db	250	GTAACAGAGATATGGGAGGCAAAATACAACTTCTGTGTGACGGGACAACGACCGCAGGA	309
QY	319	GAAGGTGATTCGGGGTAGCCAAAGCTCTTGTGGTGTACTTCTTCCAACTAGTGGAG	378
Db	310	GAATCAGATGTGAAGATTACGGTGTCCCTGTGTGTACTCTCTCCAACTCATGAA	369
QY	379	TTCCGTGACAGATTTTCTTGTGTTACGAAAAAGACCAATCAGATACCTTCCTTAT	438
Db	370	TTTATGGACATTTCTTCTTTCATCTGCCAAGAACACACAGATACCGTCTTGAC	429
QY	439	GTCATACCAACGCGTGCATGTTTCAACATCTGTGTGTGTTTGAACGTGATCCTGT	488
Db	430	GTCACACCAATCCCTGATGTGAAACATCTGTGTGTTGTGATGAACTGGGTCCCTGC	489
QY	499	GGTCAAGACTTCTTTGGACCCACCTGAAACAGCTTATTCACATTTCTATCTCTAC	558
Db	490	GGCAGCTCTTATTTGGTGGCCACACTTATTACTTCATCCAGTCCCTCATTACTTAC	549
QY	559	TACGGCCTGTCTGTTCCTCCGTCACATGCAAGTACCTTGGTGGAAAGATTAACACA	618
Db	550	TATGTTTGTGTGACGTCCCTTCACAGCTCATACCTCTGTGGTGAAGATATATACCT	609
QY	619	CAGGCTCAGTGTGTGAGTTCTGACTCAGCATCAGCAACAGCTGAGCGCGTGAAG	678
Db	610	CAGGGGAGGTGCTTACGTTTGTGTGTGACAAATCATCCAGAACAGGTGGGGGTATGTGG	669
QY	679	CCCTGTGGCTTCCCTTTGGCTGTCTCATCTTCCAGCTCTCCATATGATGACGCTGGTC	728
Db	670	CCGTGCACATTCCTCTGTGTGTGTGTGTATTTCCAGATGGATCATATATTCCTGAT	729
QY	739	ATCCTGTTTAACTCTATATTCAGATACCGGAAAA	779
Db	730	GCTCTCTTCAAACTTTTCATTCAGACTTCAACAAAGAA	770

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RESULT 15
US-10-431-952-21
Sequence 21, Application US/10431952
Publication No. US20030190733A1
GENERAL INFORMATION:
APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, Pradip
APPLICANT: Huang, Yung-Sheng
APPLICANT: Das, Tapas
APPLICANT: Thurmond, Jennifer
APPLICANT: Peretira, Suzette L.
TITLE OF INVENTION: DECATRASE GENES AND USES THEREOF
FILE REFERENCE: 6763 US.O1
CURRENT APPLICATION NUMBER: US/10/431,952
CURRENT FILING DATE: 2003-05-08
PRIORITY APPLICATION NUMBER: US/09/765,863
PRIORITY FILING DATE: 2001-01-25
NUMBER OF SEQ ID NOS: 32
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 21
LENGTH: 914
TYPE: DNA
ORGANISM: Homo sapiens
US-10-431-952-21

```

Query Match	37.4%;	Score 329;	DB 14;	Length 914;
Best Local Similarity	64.5%;	Pred. No. 1.9e-98;		
Matches 491;	Conservative	0;	Mismatches 270;	Indels 0;
			Gaps	0;

**OY**

19 TTGATTAAGACCTCAACTTTTCTTGGAACAATTGGACCAGCATTCCTCGAATT 78  
||| ||| |  
**Dd**

10 TTTGATGCATCAGCTTAGTAACTATTCCAAGCATTTGCCAGCCCTCGAGATACTAGA GTA 69

QY	72	CGGGGGTGGTCCGTGGACCTTACCTCCACGCTTCAATCCCAACATCAAGTACG	138
Db	70	AAAGGATGTTCTTCTGACAAATTATATACCCACTTTATCTGCTCTGCATATATTTA	129
QY	139	CTCTCGATATGCTGGGTAAACAAGTACATGAAGAACAGCGCTGCTGTCTCTCAGAGGC	198
Db	130	CTAATTGTATGGCTGGGACCAAAATACATGAGGAATTAACAGCCATTCTCTGGCCGGGG	189
QY	199	ATCCCTACCTTGTATTAACCTGGCAATCACTTCTTTCTGTGTATGCTGGTGAAGCTC	258
Db	190	ATTTTATGTGTATTAACCTTGAAGTCAAGCTGCTGTCTGTATATGTTCTGTGAATTA	249
QY	259	ATCCCTCCAGCTGGGAAGAGGTATCAACTGTGACAGTCCGAATCTCGACAGTGCAGA	318
Db	250	GTAACAGAGATATGGGAAGGCAAAATACAACTTCTGTGTGAGGCAACGACACGACAGA	309
QY	319	GAAGGTGATGTCCGGGTAGCCAAAGTCTTGTGTGTGTATCTTCTCCAACTATGTGAG	378
Db	310	GAATCAGATATGAAGATTATCCGTCTCTCGTGGGTATCTATCTTCTCAAATCATAGAA	369
QY	379	TTCCCTGACACGATTTTCTTTGTGTACGAATAAAGACCAATCAGATCACCTTCTTCAT	438
Db	370	TTTATGACATTTTCTTCTCATCTGTGGCAAGAACCAACACGATCAAGTCTGTGAC	429
QY	439	GTCTATACACGCGTCCATGTTCAACATCTGTGTGTGTGTTTGAACGTGAATCCTGT	498
Db	430	GTGTACCAACATGCCCTCGATGCTGAACATCTGTGTGTGTGTGAAGAACTGGTCCCTGC	489
QY	499	GGTCAAGGCTCTTTGGAACCAACCGCTGAACGTTTATCCACATTTCACTGTACTCCAC	558
Db	490	GCGCACTCTTATTTGTGTGACCACTTAATATGCTTCATCCAGTCTCTCATGTACTGTAC	549
QY	559	TACGCGCTGTCTGTCTCCGTCCATGCAAGCAAGTACCTTTGTGTGAAGAACTTCACA	618
Db	550	TATGTTTGTCTGCATGCCCTTCCATGCTGCATACCTCTGTGTGAAGAACTATCATCT	609
QY	619	CAGGCTCACTGTGTGAGTGTGTACTACCAATCAACGCAACAGCTGAAGTCCGATGTAAG	678
Db	610	CAGGGGCAAGTCTCTCATGTTTGTGTGTGCAATTCATCCAGCAAGCTCGGGGTATGTGG	669
QY	679	CCCTGTGGCTTCCCTTTGGCTGTCTCATCTTCAGTCTTCATATATGATGACGTGTGC	738
Db	670	CCGTGCACATTCCTCTTGTGTGTGTGTGTATTCAGATGTGATTCATTAATTTCCCTGATT	729
QY	739	ATCCCTGTCTTAACTCTCATATTTAGACATACCGGAAAAA	779
Db	730	GCTCTTTCAAACTTCACTTAATTAAGCTTACACAAAGAA	770

Search completed: April 1, 2004, 10:45:02  
Job time : 375.044 secs







Db 241 TATAATGCTGTGAGAGCTCATCTCTCCAGCTGGAGAGAGGTTACCACTTGCACTGTGAC 300  
 Qy 301 AATCTGACAGTGCAGAGAGAGGTGATGTCGGGATGAGCAAGTCTTGAGTGAGTAC 360  
 Db 301 AATCTGACAGTGCAGAGAGAGGTGATGTCGGGATGAGCAAGTCTTGAGTGAGTAC 360  
 Qy 361 TTCTCCAACTAGTGAAGTTCCTGACACAGATTTCTTTGTTCTACGAAAAAGCCAA 420  
 Db 361 TTCTCCAACTAGTGAAGTTCCTGACACAGATTTCTTTGTTCTACGAAAAAGCCAA 420  
 Qy 421 CAGATCACTCTCTCATGTCATGACCAAGGTCACATGTCATCAATCTGGTGAGT 480  
 Db 421 CAGATCACTCTCTCATGTCATGACCAAGGTCACATGTCATCAATCTGGTGAGT 480  
 Qy 481 TTGAACTGATACCTTGAGTCAAGCTTCTTGGACCACTGACCAAGCTTTATCCAC 540  
 Db 481 TTGAACTGATACCTTGAGTCAAGCTTCTTGGACCACTGACCAAGCTTTATCCAC 540  
 Qy 541 ATTCTCATGTAATCTGTAAGCTGTCGCTGTCGCTGTCGCTGTCGCTGTCGCTGTC 600  
 Db 541 ATTCTCATGTAATCTGTAAGCTGTCGCTGTCGCTGTCGCTGTCGCTGTCGCTGTC 600  
 Qy 601 TGGAGAGAGTACCTGACACAGGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 660  
 Db 601 TGGAGAGAGTACCTGACACAGGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 660  
 Qy 661 CTGAGTCCGCTGAGTGAAGCCCTGTCGCTTCCCTTGGCTGTCATCTTCAGTCTTC 720  
 Db 661 CTGAGTCCGCTGAGTGAAGCCCTGTCGCTTCCCTTGGCTGTCATCTTCAGTCTTC 720  
 Qy 721 TATATGATGAGCGTGTGATCCTGTCCTTAACTCTATATGACATACCGGAAAG 780  
 Db 721 TATATGATGAGCGTGTGATCCTGTCCTTAACTCTATATGACATACCGGAAAG 780  
 Qy 781 CCAAGTGAAGAGTGCAG 840  
 Db 781 CCAAGTGAAGAGTGCAG 840  
 Qy 841 ATTGTGCTAATGCTGATGACGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 879  
 Db 841 ATTGTGCTAATGCTGATGACGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 879

## RESULT 2

; Sequence 6, Application US/09903456  
 ; Patent No. 6677145  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Leonard, Amanda Eun-Yeong  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6407.US.P3  
 ; CURRENT APPLICATION NUMBER: US/09/903,456  
 ; PRIOR FILING DATE: 2001-07-11  
 ; PRIOR APPLICATION NUMBER: US 09/624,670  
 ; PRIOR FILING DATE: 2000-07-24  
 ; PRIOR APPLICATION NUMBER: US 09/379,095  
 ; PRIOR FILING DATE: 1999-08-23  
 ; PRIOR APPLICATION NUMBER: US 09/145,828  
 ; PRIOR FILING DATE: 1998-09-02  
 ; NUMBER OF SEQ ID NOS: 116  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 6  
 ; LENGTH: 900  
 ; TYPE: DNA  
 ; ORGANISM: Mus musculus  
 ; US-09-903-456-6

Query Match 39.2%; Score 345; DB 4; Length 900;  
 Best Local Similarity 65.8%; Pred. No. 2.3e-97;

Matches 501; Conservative 0; Mismatches 260; Indels 0; Gaps 0;  
 Qy 19 TTTGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 78  
 Db 10 TTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 69  
 Qy 79 CCGGAGTGTCTCTGCTGAGTCTTACCTTCCACCTTCACTCATCTCACATCAGTACCTG 138  
 Db 70 AAGGATGATGCTCTCTGAGACATATACCTCTGAGTGTGCTGCTGCTGCTGCTGCTG 129  
 Qy 139 CTCTGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 198  
 Db 130 CTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 189  
 Qy 199 ATCTCAGCTTGTATATACCTGACATCACTTCTTCTGCTGATGATGATGATGATGAT 258  
 Db 190 ATCTCAGCTTGTATATACCTGACATCACTTCTTCTGCTGATGATGATGATGATGAT 249  
 Qy 259 ATCTCTCAGCTGAGAGAGAGATGATCACTTGTGAGTGTGAGTGTGAGTGTGAGTGTG 318  
 Db 250 GTGACAGTGTGTGAG 309  
 Qy 319 GAAGTGTGTGAG 378  
 Db 310 GAATCCGATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 369  
 Qy 379 TTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 438  
 Db 370 TTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 429  
 Qy 439 GTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 498  
 Db 430 GTCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 489  
 Qy 499 GGTCAAGCTTCTTGTGAG 558  
 Db 490 GGTCAAGCTTCTTGTGAG 549  
 Qy 559 TACGCTGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 618  
 Db 550 TACGCTGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 609  
 Qy 619 CAGGCTCAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 678  
 Db 610 CAGGCTCAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 669  
 Qy 679 CCTGTGCTTCCCTTGTGCTGATCTTCACTTCACTTCACTTCACTTCACTTCACTT 738  
 Db 670 CCTGTGCTTCCCTTGTGCTGATCTTCACTTCACTTCACTTCACTTCACTTCACTT 729  
 Qy 739 ATCTGCTTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 779  
 Db 730 GCTCTCTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCA 770

## RESULT 3

; Sequence 21, Application US/09769863  
 ; Patent No. 6635451  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Abbott Laboratories  
 ; APPLICANT: Mukerji, Pradip  
 ; APPLICANT: Huang, Yung-Sheng  
 ; APPLICANT: Das, Tapas  
 ; APPLICANT: Thurmond, Jennifer  
 ; APPLICANT: Pereira, Suzette L.  
 ; TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF  
 ; FILE REFERENCE: 6763.US.01  
 ; CURRENT APPLICATION NUMBER: US/09/769,863  
 ; PRIOR FILING DATE: 2001-01-25  
 ; NUMBER OF SEQ ID NOS: 32  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 21

LENGTH: 914  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-09-769-863-21

Query Match 37.4%; Score 329; DB 4; Length 914;  
 Best Local Similarity 64.5%; Pred. No. 2.2e-92;  
 Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

19 TTTGATATGAGTCATGCTTTCTTGGACAAATGTTTGAGACAGAGATTTCTGAGTT 78  
 10 TTTATGATCAGTACTTACTTACTTATTTCAAGCACTGGTACGCTTGAATACTAGTA 69  
 79 CGCGGGTGTCTCGTGAAGCTTTTACCTTCCACCTTCACTTCTGACATCAGTACCTG 138  
 70 AAAGATGTTTCTTCTGACAAATTATATACCACTTTATCTGCTCTGTCTATATTTTA 129  
 139 CTCTGATATGCTGGGTAAACAGTATAGTAAGAAACAGGCTGCTGTCTCTCAGGGGC 198  
 130 CTAAATGATGCTGGGACCAAAATACATAGAGAAATTAACAGCCATTTCTTGGCGGGG 189  
 199 ATCTCACTTGTATTAACCTCGCAATCACTTTCTTGGCTATATGCTGTGAGCTC 258  
 190 ATTATGATGATTAACCTTGAACCTGACCTGCTGTCTGTATATGTTCTGTGATTA 249  
 259 ATCTCTCAAGCTGGGAAGAGGTTTACACTTGGAGTTCAGATCTGACAGTGCAGGA 318  
 250 GTAACAGAGTATGGGAAGGCAATACACTTCTTCTGTGAGGGCACAGCACCGGAGGA 309  
 319 GAAGGTATGTCGGGGTAAAGCAAGTCTTGTGTGTATCTTCTTCCAACTAGTGAAG 378  
 310 GAATCAGATATGAAGATTAATCCGCTGCTGTGGTATCACTTCTTCCAACTAGTGA 369  
 379 TTCTGACACAGATTTCTTGTCTTACGAAAAAGCAATCAGATCACTTCTCTTAT 438  
 370 TTTATGACACTTCTTCTTCTTCTGCTGCAAGAAACACACAGATCAAGCTCTGCAC 429  
 439 GTCTATACCAAGGCTTCATGTTCAACATCTGTGTGTGTGTGTGAATCGATACCTTGT 498  
 430 GTCTACCACTGCTGCTGATGCTGATCATCTGTGTGTGTGTGTGAATCGGCTCTGC 489  
 499 GGTCAAGCTTCTTGGACCAACCTGTAAGCTTTTCCAGATCTTCTTCTTCTTCTTCT 558  
 490 GGCACCTTATTTTGTGGCCACCTTAATGCTTCAACGCTTCTTCTTCTTCTTCTTCT 549  
 559 TACGGCTGTCTGTGTCTCCGCTGCATGACAGTACTTGTGTGAAGAGTACTCTACA 618  
 550 TATGTTGT 609  
 619 CAGGCTCAGCTGT 678  
 610 CAGGGGCAAGCTGT 669  
 679 CCGTGTGCTTCCCTTGT 738  
 670 CCGTGTGCTTCCCTTGT 729  
 739 ATCTGTCTTAACTTCTATATTCAGACATACCGGAAAAA 779  
 730 GCTCTCTTCAAACTTCTATCATTCAGACCTACACAAAGAA 770

RESULT 4  
 US-09-903-456-3  
 Sequence 3, Application US/09903456  
 Patent No. 6677145  
 GENERAL INFORMATION:  
 APPLICANT: Abbott Laboratories  
 APPLICANT: Mukerji, Pradip  
 APPLICANT: Leonard, Amanda Eun-Yeons  
 APPLICANT: Huang, Yung-Sheng  
 APPLICANT: Pereira, Suzette L.  
 TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407.US.P3  
 CURRENT APPLICATION NUMBER: US/09/903,456  
 CURRENT FILING DATE: 2001-07-11  
 PRIOR APPLICATION NUMBER: US 09/624,670  
 PRIOR FILING DATE: 2000-07-24  
 PRIOR APPLICATION NUMBER: US 09/379,095  
 PRIOR FILING DATE: 1999-08-23  
 PRIOR APPLICATION NUMBER: US 09/145,828  
 PRIOR FILING DATE: 1998-09-02  
 NUMBER OF SEQ ID NOS: 116  
 SOFTWARE: FASTSEQ for Windows Version 4.0  
 SEQ ID NO 3  
 LENGTH: 914  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-09-903-456-3

Query Match 37.4%; Score 329; DB 4; Length 914;  
 Best Local Similarity 64.5%; Pred. No. 2.2e-92;  
 Matches 491; Conservative 0; Mismatches 270; Indels 0; Gaps 0;

19 TTTGATATGAGTCATGCTTTCTTGGACAAATGTTTGAGACAGAGATTTCTGAGTT 78  
 10 TTTATGATCAGTACTTACTTACTTATTTCAAGCACTGGTACGCTTGAATACTAGTA 69  
 79 CGCGGGTGTCTCGTGAAGCTTTTACCTTCCACCTTCACTTCTGACATCAGTACCTG 138  
 70 AAAGATGTTTCTTCTGACAAATTATATACCACTTTATCTGCTCTGTCTATATTTTA 129  
 139 CTCTGATATGCTGGGTAAACAGTATAGTAAGAAACAGGCTGCTGTCTCTCAGGGGC 198  
 130 CTAAATGATGCTGGGACCAAAATACATAGAGAAATTAACAGCCATTTCTTGGCGGGG 189  
 199 ATCTCACTTGTATTAACCTCGCAATCACTTTCTTGGCTATATGCTGTGAGCTC 258  
 190 ATTATGATGATTAACCTTGAACCTGACCTGCTGTCTGTATATGTTCTGTGATTA 249  
 259 ATCTCTCAAGCTGGGAAGAGTTCACACTTGGAGTTCAGATCTGACAGTGCAGGA 318  
 250 GTAACAGAGTATGGGAAGGCAATACACTTCTTCTGAGGGCACAGCACCGGAGGA 309  
 319 GAAGGTATGTCGGGGTAAAGCAAGTCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 378  
 310 GAATCAGATATGAAGATTAATCCGCTGCTGTGGTATCACTTCTTCCAACTAGTGA 369  
 379 TTCTGACACAGATTTCTTGTCTTACGAAAAAGCAATCAGATCACTTCTCTTAT 438  
 370 TTTATGACACTTCTTCTTCTTCTGCTGCAAGAAACACACAGATCAAGCTCTGCAC 429  
 439 GTCTATACCAAGGCTTCATGTTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGT 498  
 430 GTCTACCACTGCTGCTGATGCTGATCATCTGTGTGTGTGTGTGTGTGTGTGTGTGT 489  
 499 GGTCAAGCTTCTTGGACCAACCTGTAAGCTTTTCCAGATCTTCTTCTTCTTCTTCTTCT 558  
 490 GGCACCTTATTTTGTGGCCACCTTAATGCTTCAACGCTTCTTCTTCTTCTTCTTCTTCT 549  
 559 TACGGCTGTCTGTGTCTCCGCTGCATGACAGTACTTGTGTGAAGAGTACTCTACA 618  
 550 TATGTTGT 609  
 619 CAGGCTCAGCTGT 678  
 610 CAGGGGCAAGCTGT 669  
 679 CCGTGTGCTTCCCTTGT 738  
 670 CCGTGTGCTTCCCTTGT 729  
 739 ATCTGTCTTAACTTCTATATTCAGACATACCGGAAAAA 779  
 730 GCTCTCTTCAAACTTCTATCATTCAGACCTACACAAAGAA 770

## RESULT 5

US-09-903-456-7

Sequence 7, Application US/09903456

Patent No. 6677145

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Leonard, Amanda Eun-Yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407/US.P3

CURRENT APPLICATION NUMBER: US/09/903,456

CURRENT FILING DATE: 2001-07-11

PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 116

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 7

LENGTH: 819

TYPE: DNA

ORGANISM: Thraustochytrium aureum

US-09-903-456-7

Query Match

Best Local Similarity

Matches 317; Conservative 0; Mismatches 286; Indels 6; Gaps 2;

QY 190 CTCAGGGGATCTCTCACTTGTATTAACCTGCACATCACTTCTTCCGTATATGCTG 249  
 Db 205 CTCAGGACATCAAGCTCTTGACACTTGTCTTCTTGAGACTTCTTCTTGACATGTC 264  
 QY 250 GTGAGCTCATCTCTCCAGCTGGAAGAGGTAACTTGCAGTTCAGATTCGAC 309  
 Db 265 GTGAGACCATCCGACAGCTATCTCGAGGCTTAAAGTCTTTGAAAACGACATGAG 324  
 QY 310 AGTCAGAGAGAGTATGTCCGG--TAGCCAAAGCTTGTGTACTACTTCTCC 366  
 Db 325 AAGGCAAGAGTCTATGCTCAGGACATGTCGATCTGTAGTGTTCAGGTGCC 384  
 QY 367 AAACATAGAGTCTCTGACACGATTTCTTGTCTACGAAAAAAGCAATATGATC 426  
 Db 385 AAGGCAATACAGTCTTGTGATACCGCATCATGATCTTTGCAAAAGTTCAACGAGTT 444  
 QY 427 ACCCTCTCATGTCTATACACAGGCTCATGTTCAACATCTGGTGTGTGTTGAAC 486  
 Db 445 TCCTCTTGATGTGTACACATGCAATGCAATTTTGCATCTGTGGGTATGCCAAG 504  
 QY 487 TGTATACCTTGTGTCAAAAGCTTCTTTGACCCACCCGTAACAGCTTTATCCATCTC 546  
 Db 505 TACGCTCAGAGGTGATGCTGATCTTTGATGATCTCACTTTGTGTGACACCGTCC 564  
 QY 547 ATGATCTCTACTACAGGCTGTGTGTGTGTTCCGTCATGCAAGATCTTTGTGAGAG 606  
 Db 565 ATGATGCAATACATCTTCTTCTCCCAAGGTTGGGTTGTGAGC--CAATCAAG 621  
 QY 607 AAGTACTCTACTACAGGCTGTGTGTGTGTTCCGTCATGCAAGATCTTTGTGAGAG 666  
 Db 622 CCGTATACACACCCCTTCAGATGACCCAGTTTCATGCAATCTTTGTGAGTCTTGTAC 681  
 QY 667 GCCGTGTGAAGCCCTGT 726  
 Db 682 GACTACCTCTTCCATGAGCACTACCAAGGCTCTTGTGCACTCTTTGAGTGTATG 741  
 QY 727 ATGACGTGTGTATCTCTGTCTTAACTTATATTCAGACATACCGGAAAAAGGCACTG 786  
 Db 742 ATCACTGT 801

QY 787 AAGAAAGAG 795  
 Db 802 AAGAGCAAG 810

## RESULT 6

US-09-903-456-70

Sequence 70, Application US/09903456

Patent No. 6677145

GENERAL INFORMATION:

APPLICANT: Abbott Laboratories

APPLICANT: Mukerji, Pradip

APPLICANT: Leonard, Amanda Eun-Yeong

APPLICANT: Huang, Yung-Sheng

APPLICANT: Pereira, Suzette L.

TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF

FILE REFERENCE: 6407/US.P3

CURRENT APPLICATION NUMBER: US/09/903,456

CURRENT FILING DATE: 2001-07-11

PRIOR APPLICATION NUMBER: US 09/624,670

PRIOR FILING DATE: 2000-07-24

PRIOR APPLICATION NUMBER: US 09/379,095

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 09/145,828

PRIOR FILING DATE: 1998-09-02

NUMBER OF SEQ ID NOS: 116

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 70

LENGTH: 819

TYPE: DNA

ORGANISM: Thraustochytrium aureum

US-09-903-456-70

Query Match

Best Local Similarity

Matches 316; Conservative 0; Mismatches 287; Indels 6; Gaps 2;

QY 190 CTCAGGGGATCTCTCACTTGTATTAACCTGCACATCACTTCTTCCGTATATGCTG 249  
 Db 205 CTCAGGACATCAAGCTCTTGACACTTGTCTTCTTGAGACTTCTTCTTGACATGTC 264  
 QY 250 GTGAGCTCATCTCTCCAGCTGGAAGAGGTAACTTGCAGTTCAGATTCGAC 309  
 Db 265 GTGAGACCATCCGACAGCTATCTCGAGGCTTAAAGTCTTTGAAAACGACATGAG 324  
 QY 310 AGTCAGAGAGAGTATGTCCGG--TAGCCAAAGCTTGTGTACTACTTCTCC 366  
 Db 325 AAGGCAAGAGTCTATGCTCAGGACATGTCGATCTGTAGTGTTCAGGTGCC 384  
 QY 367 AAACATAGAGTCTCTGACACGATTTCTTGTCTACGAAAAAAGCAATATGATC 426  
 Db 385 AAGGCAATACAGTCTTGTGATACCGCATCATGATCTTTGCAAAAGTTCAACGAGTT 444  
 QY 427 ACCCTCTCATGTCTATACACAGGCTCATGTTCAACATCTGGTGTGTGTTGAAC 486  
 Db 445 TCCTCTTGATGTGTACACATGCAATGCAATTTTGCATCTGTGGGTATGCCAAG 504  
 QY 487 TGTATACCTTGTGTCAAAAGCTTCTTTGACCCACCCGTAACAGCTTTATCCATCTC 546  
 Db 505 TACGCTCAGAGGTGATGCTGATCTTTGATGATCTCACTTTGTGTGACACCGTCC 564  
 QY 547 ATGATCTCTACTACAGGCTGTGTGTGTGTTCCGTCATGCAAGATCTTTGTGAGAG 606  
 Db 565 ATGATGCAATACATCTTCTTCTCCCAAGGTTGGGTTGTGAGC--CAATCAAG 621  
 QY 607 AAGTACTCTACTACAGGCTGTGTGTGTGTTCCGTCATGCAAGATCTTTGTGAGAG 666  
 Db 622 CCGTATACACACCCCTTCAGATGACCCAGTTTCATGCAATCTTTGTGAGTCTTGTAC 681  
 QY 667 GCCGTGTGAAGCCCTGT 726  
 Db 682 GACTACCTCTTCCATGAGCACTACCAAGGCTCTTGTGCACTCTTTGAGTGTATG 741



QY 607 AAGTACCTACACAGAGCTCAGTGTGAGTGGTATGACTGACCATGACGACAGCTGAGT 666  
Db 622 CCGTACATACACACCCCTTTCAGATGACCCAGTTCATGCAATGCTGTGAGCTTGTAC 681  
QY 667 GCCGTGATGAAAGCCCTGTGCTCCCTTTGCTGTCTCATCTTCCAGCTTCCATATG 726  
Db 682 GACTACCTCTTCCATGCGACTGACCAAGGCTTGTGACACTTCTTGAGTGTACATG 741  
QY 727 ATGACGTGTCATCCTGTTCTTAACCTTATATTCAGACATACCGGAAAAGCCAGTGT 786  
Db 742 ATCACTTGTGCTGCTTCCCTTTCGCACTTTTGTGCAAGCTATCTTAAAGCCAAA 801  
QY 787 AAGAAAGAG 795  
Db 802 AAGAGCAAG 810

## RESULT 9

US-09-903-456-72  
; Sequence 72, Application US/09903456  
; Patent No. 6677145  
; GENERAL INFORMATION:  
; APPLICANT: Abbott Laboratories  
; APPLICANT: Mukerji, Pradip  
; APPLICANT: Leonard, Amanda Eun-Yeong  
; APPLICANT: Huang, Yung-Sheng  
; APPLICANT: Pereira, Suzette L.  
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
; FILE REFERENCE: 6407, US, P3  
; CURRENT APPLICATION NUMBER: US/09/903,456  
; CURRENT FILING DATE: 2001-07-11  
; PRIOR APPLICATION NUMBER: US 09/624,670  
; PRIOR FILING DATE: 2000-07-24  
; PRIOR APPLICATION NUMBER: US 09/379,095  
; PRIOR FILING DATE: 1999-08-23  
; PRIOR APPLICATION NUMBER: US 09/145,828  
; PRIOR FILING DATE: 1998-09-02  
; NUMBER OF SEQ ID NOS: 116  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 72  
; LENGTH: 819  
; TYPE: DNA  
; ORGANISM: *Thraustochytrium aureum*  
US-09-903-456-72

Query Match 13.2%; Score 116.2; DB 4; Length 819;  
Best Local Similarity 51.7%; Pred. No. 4e-26;  
Matches 315; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 190 CTCAGGGGCACTCCTCAGCTTGTATTAACCTGCAATCACACTTCTTCTGCTATATGCTG 249  
Db 205 CTCAGACCATCAAGCTTGTGACACTTGTCTTCTGAGACTTTCCTTGTACATGTGC 264  
QY 250 GTGAGCTCATCTCTCAGCTGGGAAAGAGTTACACTTGCAGTGCAGATCTGCAG 309  
Db 265 GTGAGACCATCCGCAAGCTATCTCGAGGCTACAAAGTGTGGAAGACATGAG 324  
QY 310 AGTCCAGAGAAAGTGTATCTCCGG--TAGCCAAAGTCTGTGGTGTGACTTATCTCC 366  
Db 325 AAGGGCAACAGTCTCATGCTCAGGGGAGTCTGCGATGCTGATGCTGTTTACGTTCC 384  
QY 367 AACTAGTGAAGTCTCGACACAGATTTTCTTGTCTACGAAAAAGACCAATGAGATC 426  
Db 385 AAGGCATACAGATCTTGTGATACGGCCATCATATCTTTGCAAGAAAGTTCAACAGGTT 444  
QY 427 ACCTTCTTATGCTATACACAGGCTCATGTTCAACATCTGGTGTGTGTTTGAAC 486  
Db 445 TCTCTTGTGATGTGTACCAACATGCAACCGTTTGTGCACTGGGGCTATCCGCAAG 504  
QY 487 TGAATACCTGTGTGTAAGCTTCTTGTGACCAACCGTGAACAGCTTATCCACTTCTC 546  
Db 505 TACCTCCAGAGAGTGTATGCTACTTTTGAATGATCTCACTTTTGTGTGACACCGTTC 564

QY 547 ATGTACTCTTACTAGAGCCCTGTGTGTTCCTCCGTCATGACCAAGTACTTTGTGGAAG 606  
Db 565 ATGTAGCATACTACTTCTTCTTCCCAAGGTTGGGTTCTGGAAGC---CAATCAAG 621  
QY 607 AAGTACCTACACAGGCTCAGTGTGAGTGTGCTACATCAACATCAGGCAACGCTGAGT 666  
Db 622 CCGTATATACACACCCCTTCAATGATGACCCAGTCTTATGCAATGCTTGTGACTCTTGTAC 681  
QY 667 GCCGTGATGAAAGCCCTGTGCTCCCTTTGCTGTCTCATCTTCCAGTCTTCCATATG 726  
Db 682 GACTACCTCTTCCATGAGACTACCAAGGCTGTGTGACGCTTCTTGAGTGTACATG 741  
QY 727 ATGACGTGTCTATCTGTTCTTAACCTTATATTCAGACATACCGGAAAAGCCAGTGT 786  
Db 742 ATCACTTGTGCTGCTTCCCTTTCGCAACTTTTGTGCAAGCTATCTTAAAGCCAAA 801  
QY 787 AAGAAAGAG 795  
Db 802 AAGAGCAAG 810

## RESULT 10

US-09-903-456-73  
; Sequence 73, Application US/09903456  
; Patent No. 6677145  
; GENERAL INFORMATION:  
; APPLICANT: Abbott Laboratories  
; APPLICANT: Mukerji, Pradip  
; APPLICANT: Leonard, Amanda Eun-Yeong  
; APPLICANT: Huang, Yung-Sheng  
; APPLICANT: Pereira, Suzette L.  
; TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF  
; FILE REFERENCE: 6407, US, P3  
; CURRENT APPLICATION NUMBER: US/09/903,456  
; CURRENT FILING DATE: 2001-07-11  
; PRIOR APPLICATION NUMBER: US 09/624,670  
; PRIOR FILING DATE: 2000-07-24  
; PRIOR APPLICATION NUMBER: US 09/379,095  
; PRIOR FILING DATE: 1999-08-23  
; PRIOR APPLICATION NUMBER: US 09/145,828  
; PRIOR FILING DATE: 1998-09-02  
; NUMBER OF SEQ ID NOS: 116  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 73  
; LENGTH: 819  
; TYPE: DNA  
; ORGANISM: *Thraustochytrium aureum*  
US-09-903-456-73

Query Match 13.2%; Score 116.2; DB 4; Length 819;  
Best Local Similarity 51.7%; Pred. No. 4e-26;  
Matches 315; Conservative 0; Mismatches 288; Indels 6; Gaps 2;

QY 190 CTCAGGGGCACTCCTCAGCTTGTATTAACCTGCAATCACACTTCTTCTGCTATATGCTG 249  
Db 205 CTCAGACCATCAAGCTTGTGACACTTGTCTTCTGAGACTTTCCTTGTACATGTGC 264  
QY 250 GTGAGCTCATCTCTCAGCTGGGAAAGAGTTACACTTGCAGTGCAGATCTGCAG 309  
Db 265 GTGAGACCATCCGCAAGCTATCTCGAGGCTACAAAGTGTGGAAGACATGAG 324  
QY 310 AGTCCAGAGAAAGTGTATCTCCGG--TAGCCAAAGTCTGTGGTGTGACTTATCTCC 366  
Db 325 AAGGGCAACAGTCTCATGCTCAGGGGAGTCTGCGATGCTGATGCTGTTTACGTTCC 384  
QY 367 AACTAGTGAAGTCTCGACACAGATTTTCTTGTCTACGAAAAAGACCAATGAGATC 426  
Db 385 AAGGCATACAGATCTTGTGATACGGCCATCATATCTTTGCAAGAAAGTTCAACAGGTT 444  
QY 427 ACCTTCTTATGCTATACACAGGCTCATGTTCAACATCTGGTGTGTGTTTGAAC 486  
Db 445 TCTCTTGTGATGTGTACCAACATGCAACCGTTTGTGCACTGGGGCTATCCGCAAG 504

QY	48	TGATACCTGTGTGTAAGCTCTCTTGGACCCACCCGGAACAGCTTATCAATTCTC	546
Db	505	TAGCTCCAGAGAGTATAGCTACTTTTCAGTACCTCTTTGGTGCACACGTC	564
QY	547	ATGTACTCTACTACGGCTGTGTGTGTTCCCGTCATGCACAAAGTACTTTGTGGAAG	606
Db	565	ATGTAGCGCATACACTTCTTCTCTCCCAAGGGTTCGGGTTCGTGAAC--CAATCAAG	622
QY	607	AAGTACCTCACAAGGCTAGCTGTGGTCAGTTCGACTCACCATTCACCAACACGCTAGT	666
Db	622	CGGTATATCAACACCCCTTCAGATGACCAAGTTCATGGCAAGCTTGGCAAGCTCTGTAC	682
QY	667	GCCGTGTGAAGCCCTGTGTGCTTCCCTTTGGCTGTCTCATCTTCAGTCTTTCTAATG	726
Db	682	GACTACCTCTTCCACGACACTACCCACAGCTCTGTGGACGCTTTGAGAGTGAATG	742
QY	727	ATGACGCTGTGCATCCTGTCTTAAACTTCATATTCAGACATACCGGAAAAAGCCAGTG	786
Db	742	ATCACCTGTGCTCCCTCTTCGGCAACTTTTGTGGACAGGTATCTTAAAAAGCCAAA	802
QY	787	AAGAAAGAG 795	
Db	802	AAGAGCAAG 810	

```

      US-09-903-456-74
      RESULT 11
      / Sequence 74, Application US/09903456
      / Patent No. 6677145
      / GENERAL INFORMATION:
      / APPLICANT: Abbott Laboratories
      / APPLICANT: Mukerji, Pradip
      / APPLICANT: Leonard, Aranda Eun-Yeong
      / APPLICANT: Huang, Yung-Sheng
      / APPLICANT: Pereira, Suzette L.
      / TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
      / FILE REFERENCE: 6407.US.P3
      / CURRENT APPLICATION NUMBER: US/09/903,456
      / CURRENT FILING DATE: 2001-07-11
      / PRIOR APPLICATION NUMBER: US 09/624,670
      / PRIOR FILING DATE: 2000-07-24
      / PRIOR APPLICATION NUMBER: US 09/379,095
      / PRIOR FILING DATE: 1999-08-23
      / PRIOR APPLICATION NUMBER: US 09/145,828
      / PRIOR FILING DATE: 1998-09-02
      / NUMBER OF SEQ ID NOS: 116
      / SOFTWARE: FastSeq for windows Version 4.0
      / SEQ ID NO 74
      / LENGTH: 819
      / TYPE: DNA
      / ORGANISM: Thraustochytrium aureum
      / US-09-903-456-74

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Query Match	13.2%;	Score 116.2;	DB 4;	Length 819;
Best Local Similarity	51.7%;	Pred. No. 4e-26;		
Matches 315; Conservative	0;	Mismatches 288;	Indels 6;	Gaps 21

QY 190 CTGAGGGGATCTCTACCTTTGATTAACCTGCAATCAACACTCTTTCCGGGTAATGCTG 249

Db 205 CTCAAGGCATCAAGCTCTTGGCAACATTGTTCTCTTGGACATTTCTGTATACATGTGC 264

QY 250 GTGAGAGTCATCTCTTCACGTGGGAAGAGTTTCAACTGCAGTGTCAAAATCTGCAG 309

Db 265 GTGGTGACCATCCGCCAGGCTATCTCTGGAGGCTCAAAAGTGTGGAAAGCAATGAG 324

QY 310 AGTGCAGAGAAAGATGATGTCGGG---TAGCCAAAGTCTTGTGTGTGTACTTCTCC 366

Db 325 AAGGCAACACAGTCTCATCTCATGAGGCAATGTCGCATCGTGTACGTGTTCTACGTATCC 384

QY 367 AAACATGTGAGTCTCTGCAACAGATTTTCTTTGTTTACAGAAAAAAGACCAATCAGATC 426

Db 385 AAGGCATACGATTTTGTGATACCGCCATCATGATCTTTGCAGAAATTACACAGTT 444

Oy	42	ACCTCCCTCATCTCATCACCAAGGTCAGTTCACATCTGAGTGTGTTGAAC	488
Dd	445	TCCCTCTTGATGTATGACCAACATGACCACTTTTGGCATCTGTGGGCTATGGCAAG	506
Oy	487	TGGATACCTTGTGTCAAGCTCTTTGGAGCCACCCCTGAACAGCTTTATGCACATTC	548
Dd	505	TAGCTCCAGAGGTATGCTGACTTTTCAGTATCTCTCACTCTTGTGTGCACACGTC	566
Oy	547	ATGTACTCCATCTAGAGGCTGTCTGTGTTCCCTGCATGCACAGTACCTTTGGTGGAG	608
Dd	565	ATGTAGGCATACTACTCTTCTCTCCCAAGGGTTCGGGTTGTGAAC---CAATCAAG	622
Oy	607	AAGNACCTACACAGGCTCAGCTGGGAGGTTCTGACTCACCATTCACCAACAGCCTGAGT	668
Dd	622	CCGTACATCCACACCTTCAGATGACCACTTCATGCAATGCTTTGTGCATCTCTTGAC	688
Oy	667	GCCGTGATGAAGCCCTGTGGGCTTCCCTTTGGCTGTCTCATCTTCCACTCTTCCATATAG	728
Dd	682	GACTACCTCTTCCATGCACATACCAACAGGCTCTTGACAGCTCTTTGAGTGTACATG	744
Oy	727	ATGACGCTGTATCTCTGTTCTTAACTTCATATTGACATACCGGAAAAACCCAGTG	788
Dd	742	ATACCTGTGCTGCTCTTGGCAACTTTTGTGCAAGACTATCTTAAAAAGCCAAAA	801
Oy	787	AAGAAAGAG	795
Dd	802	AAGAGCAAG	810

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1      RESULT 12
2      US-09-149-476-258
3      ; Sequence 258. Application US/09149476
4      ; Patent No. 6420526
5      ; GENERAL INFORMATION:
6      ; APPLICANT: Rosen et al.
7      ; TITLE OF INVENTION: 186 Human Secreted proteins
8      ; FILE REFERENCE: P2002P1
9      ; CURRENT APPLICATION NUMBER: US/09/149,476
10     ; CURRENT FILING DATE: 1998-09-08
11     ; EARLIER APPLICATION NUMBER: PCT/US98/04493
12     ; EARLIER FILING DATE: 1998-03-06
13     ; EARLIER APPLICATION NUMBER: 60/040,162
14     ; EARLIER FILING DATE: 1997-03-07
15     ; EARLIER APPLICATION NUMBER: 60/040,333
16     ; EARLIER FILING DATE: 1997-03-07
17     ; EARLIER APPLICATION NUMBER: 60/038,521
18     ; EARLIER FILING DATE: 1997-03-07
19     ; EARLIER APPLICATION NUMBER: 60/040,626
20     ; EARLIER FILING DATE: 1997-03-07
21     ; EARLIER APPLICATION NUMBER: 60/040,334
22     ; EARLIER FILING DATE: 1997-03-07
23     ; EARLIER APPLICATION NUMBER: 60/040,336
24     ; EARLIER FILING DATE: 1997-03-07
25     ; EARLIER APPLICATION NUMBER: 60/040,163
26     ; EARLIER FILING DATE: 1997-03-07
27     ; EARLIER APPLICATION NUMBER: 60/047,600
28     ; EARLIER FILING DATE: 1997-05-23
29     ; EARLIER APPLICATION NUMBER: 60/047,615
30     ; EARLIER FILING DATE: 1997-05-23
31     ; EARLIER APPLICATION NUMBER: 60/047,597
32     ; EARLIER FILING DATE: 1997-05-23
33     ; EARLIER APPLICATION NUMBER: 60/047,502
34     ; EARLIER FILING DATE: 1997-05-23
35     ; EARLIER APPLICATION NUMBER: 60/047,633
36     ; EARLIER FILING DATE: 1997-05-23
37     ; EARLIER APPLICATION NUMBER: 60/047,583
38     ; EARLIER FILING DATE: 1997-05-23
39     ; EARLIER APPLICATION NUMBER: 60/047,617
40     ; EARLIER FILING DATE: 1997-05-23
41     ; EARLIER APPLICATION NUMBER: 60/047,618
42     ; EARLIER FILING DATE: 1997-05-23
43     ; EARLIER APPLICATION NUMBER: 60/047,503
44     ; EARLIER FILING DATE: 1997-05-23

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EARLIER APPLICATION NUMBER: 60/048,964  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/057,650  
EARLIER FILING DATE: 1997-09-05  
EARLIER APPLICATION NUMBER: 60/056,884  
EARLIER FILING DATE: 1997-08-22  
EARLIER APPLICATION NUMBER: 60/057,669  
EARLIER FILING DATE: 1997-09-05  
EARLIER APPLICATION NUMBER: 60/049,610  
EARLIER FILING DATE: 1997-06-13  
EARLIER APPLICATION NUMBER: 60/061,060  
EARLIER FILING DATE: 1997-10-02

Query Match 12.0%; Score 105.8; DB 4; Length 1482;  
Best Local Similarity 51.5%; Pred. No. 1e-22;  
Matches 295; Conservative 0; Mismatches 272; Indels 6; Gaps 2;

QY 92 TGCTGAGACTTACCTTCCACCTTCTCTCTCCATCAGTACCTGCTCTGGAATGAC 151  
DB 167 TGGGGTCCCTTGTCTATGACCTTCTCTCTGACGTAAGTCTGCTCTCTC 226  
QY 152 TGGGTAAAGATACATAGAGAGAGGCTCTCTCTCTGAGGAGATCTCTACCTTGT 211  
DB 227 TTGGGCTCGCATATGCTATGAGAGAGGCTCTCTCTGAGGCTCTCTCTCTCT 286  
QY 212 ATAACTGCAATCAGCTTCTCTCTGATATGCTGAGGAGCTCTCTCTCTCTCT 271  
DB 287 ACACTTCTCAGCTGAGGAGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 346  
QY 272 GGGAGAGAGGTAAATTTGCAAGTTCAGAAATCTGCAAGTGAAGAGAGGAGTATG--- 328  
DB 347 GGGTGAACCTTAATCTGAGGAGGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 406  
QY 329 TCCGGTAAAGCAAGTCTGAGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 388  
DB 407 TTAGAGATGTTGGGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 466  
QY 389 CGATTTCTTTGTTCTACGAAAAAGACCAATCAATCACTTCTCTCTCTCTCTCTCT 448  
DB 467 CAGGATCTTTATCTCTCGAAAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 526  
QY 449 ACGGCTGCAATGTTCAATCTGAGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 508  
DB 527 ACTCTGCT 586  
QY 509 TCTTTGAGACCACT 568  
DB 587 CTTCATGCGCATATTAATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 646  
QY 569 CTGCTT---CCGCTCATGAGCAAGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 625  
DB 647 CTGCTTGGGCT 706  
QY 626 AGCTGTGAGTCT 658  
DB 707 AGCTGATCAGTCT 739

## RESULT 13

US-09-149-476-106  
Sequence 106, Application US/09149476  
Patent No. 6420526  
GENERAL INFORMATION:  
APPLICANT: Rosen et al.  
TITLE OF INVENTION: 186 Human Secreted proteins  
FILE REFERENCE: P2002P1  
CURRENT APPLICATION NUMBER: US/09/149,476  
CURRENT FILING DATE: 1998-09-08  
EARLIER APPLICATION NUMBER: PCT/US98/04493  
EARLIER FILING DATE: 1998-03-06  
EARLIER APPLICATION NUMBER: 60/040,162  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,333

EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/038,621  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,626  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,334  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,336  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/040,163  
EARLIER FILING DATE: 1997-03-07  
EARLIER APPLICATION NUMBER: 60/047,600  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,615  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,597  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,502  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,633  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,583  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,617  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,618  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,503  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,592  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,581  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,584  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,500  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,587  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,492  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,598  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,613  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,582  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,596  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,612  
EARLIER FILING DATE: 1997-05-23  
EARLIER APPLICATION NUMBER: 60/047,632  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,314  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,569  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,311  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,671  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,674  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,669  
EARLIER FILING DATE: 1997-04-11  
EARLIER APPLICATION NUMBER: 60/043,312  
EARLIER FILING DATE: 1997-04-11





QY 509 TCTTGGACCCACCTGAGAGCTTTATCCATTCATGTAAGTCTTACTAGGAGCTT 568  
DB 615 CTTTCAGATGCATATTAACCTCTTCGATGATGATGATGATGATGATGATGAT 674  
QY 569 CTGTGTT---CCGTCATGACAGAGTACTTTGGAGAAAGTACTCAACAGGCTC 625  
DB 675 CTGCTTTGGCCCTGTGGACCAACCTTCTTGGTGGAAAAAGCATGACAGCATTC 734  
QY 626 AGCTGTGACAGTTCGTACTACCAATCAAGCACA 658  
DB 735 AGCTGATCCAGTTTGTCTGTCTGCTCACTGACCA 767

## RESULT 14

US-09-023-655-430  
Sequence 430, Application US/09023655  
Patent No. 6607879

## GENERAL INFORMATION:

APPLICANT: Cocks, Benjamin G.  
APPLICANT: Susan G. Stuart  
APPLICANT: Jeffrey J. Seilhamer  
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE  
TITLE OF INVENTION: EXPRESSION  
NUMBER OF SEQUENCES: 1508  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.  
STREET: 3174 PORTER DRIVE  
CITY: PALO ALTO  
STATE: CALIFORNIA  
COUNTRY: USA

ZIP: 94304

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2

## CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/023,655

## FILING DATE: HEREWITH

## CLASSIFICATION:

## PRIOR APPLICATION DATA:

## APPLICATION NUMBER:

## FILING DATE:

## ATTORNEY/AGENT INFORMATION:

NAME: Zeller, Karen J.

REGISTRATION NUMBER: 37,071

REFERENCE/DOCKET NUMBER: PA-0001 US

## TELECOMMUNICATION INFORMATION:

TELEPHONE: (650) 855-0555

TELEFAX: (650) 845-4166

## INFORMATION FOR SEQ ID NO: 430:

## SEQUENCE CHARACTERISTICS:

LENGTH: 1812 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

## IMMEDIATE SOURCE:

LIBRARY: URETTUT01

CLONE: 1658706

US-09-023-655-430

Query Match 12.0%; Score 105.8; DB 4; Length 1812;  
Best Local Similarity 51.5%; Pred. No. 1.1e-22;  
Matches 295; Conservative 0; Mismatches 272; Indels 6; Gaps 2;

QY 92 TGGTGAAGCTTCTCCACCTTCACTCAATCAATCAATCAATCAATCAATCAATG 151  
DB 522 TGGGTCCTCCCTGCTAATGACCTTCAATCTCTGACCTGATGATCTTCTTAC 581  
QY 152 TGGGTAAAGTAAAGACAGGCTGTCTGTCTCTGAGGGGCAATCTCTGT 211

DB 582 TTGGCCCTGSCATCATGCTAAACGGAACCCCTCCAGCTCCGCTTCATGATTTGCT 641  
QY 212 ATTAACCTCGAATCAACACTTTCTTGCCTATATGCTGTGAGACTCATCTCCACT 271  
DB 642 ACAACTCTACCTGCTGAGCACTCTCCCTCAATGTTCTATAGTTCTGATGCTG 701  
QY 272 GGAAGAGAGTTACACTTTCAGAGTGCAGATCTGCAGACAGTGCAGAGAGAGTATG--- 328  
DB 702 GGCCTGAGCACTTATCACTGGCCGTGACCCCTGTGACATTCACAAAGCCCTGAGGAC 761  
QY 329 TCCGGGTAGCAAGGCTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 388  
DB 762 TTGAGATGTTGCGGGGCTGCTCTTCTCTTCCAAAGTTCATGAGCTGAGTGGACA 821  
QY 389 GAAATTTCTTTGTTTACGAAAAAGAACCAATCAGTACCTCTCATGCTATCC 448  
DB 822 CAGTGATCTTTATTTCTCCAAAGAAAGAGGAGAGTACCTTCTTCAATGTTCTTCAATC 881  
QY 449 ACGCGTCATGTTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 508  
DB 882 ACTGTGCTTCCCTGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 941  
QY 509 TCTTGGACCCACCCGAAACAGCTTTATCCATCTCATGATGATGATGATGATGAT 568  
DB 942 CTTTCAGATGCATGATTAACCTCTTCCGATGATGATGATGATGATGATGATGAT 1001  
QY 569 CTGTGTT---CCGTCATGACAGAGTACTTGTGTGAGAAAGTACTCAACAGGCTC 625  
DB 1002 CTGCTTTGGCCCTGTGGACCAACCTTCTTGTGTGAAAAAGCATGACAGCATTC 1061  
QY 626 AGCTGTGAGTTCGTACTCAACCATCAGCACA 658  
DB 1062 AGCTGATCCAGTTTGTCTGTCTGCTCACTGACCA 1094

## RESULT 15

US-09-769-863-22  
Sequence 22, Application US/09769863  
Patent No. 6635451

## GENERAL INFORMATION:

## APPLICANT: Abbott Laboratories

## APPLICANT: Mukerji, Pradip

## APPLICANT: Huang, Yung-Sheng

## APPLICANT: Das, Tapas

## APPLICANT: Thurmond, Jennifer

## APPLICANT: Pereira, Suzette L.

## TITLE OF INVENTION: DESATURASE GENES AND USES THEREOF

## FILE REFERENCE: 6763 US 01

## CURRENT APPLICATION NUMBER: US/09/769,863

## FILING DATE: 2001-01-25

## NUMBER OF SEQ ID NOS: 32

## SOFTWARE: FastSeq for Windows Version 4.0

## SEQ ID NO 22

## LENGTH: 957

## TYPE: DNA

ORGANISM: *Mocetierella alpina*

US-09-769-863-22

Query Match 11.4%; Score 100; DB 4; Length 957;  
Best Local Similarity 60.8%; Pred. No. 4.9e-21;  
Matches 163; Conservative 0; Mismatches 105; Indels 0; Gaps 0;

QY 325 GATGTCGGGTAGCCAGAGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 384  
DB 439 GGTCTTCTTATAGCCAGATGATCTGCTCTTCACTTCTCAAGATCATGAGATTGTGTC 498  
QY 385 GACAGATTTCTTTGTTCTAGAAAAAGCAATGATGATCACTTCTTCTCATGCTGAT 444  
DB 499 GACACCATATATGCTCTCAAGAAAGCAAGCCAGATCTCTTCTTCACTTTC 558  
QY 445 CACACAGCTTCATGTTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 504  
DB 559 CACACAGCTTCATGTTCAACATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 618

QY 505 AGCTTCTTGGACCCACCTGACAGCTTTATCCACATCTCATGTACTCTCTACTAGGC 564  
 Db 619 GCCTACTTCTCTGCTGCGGTGAGACTCGTTCAATCCATGTGATCATGTAGGCTACTTTC 678  
 QY 565 CTGTCTGTGTCTCCGTCATGACAACT 592  
 Db 679 TTGTGGCCTTGAGCTTCAAGCAGGTGT 706

Search completed: April 1, 2004, 08:25:28  
 Job time : 80.5616 secs